					DEPARTMENT		-			AMENI	FC DED REPOR	RM 3		
		AF	PLICATION FO	R PERM	IT TO DRILL				1. WELL NAME and N		-21C1CS			
2. TYPE O	F WORK	DRILL NEW WELL	REENTER	P&A WELL	DEEPEN	WELL (	)		3. FIELD OR WILDCA	<b>T</b> NATURAL	. BUTTES			
4. TYPE O	F WELL				nane Well: NO				5. UNIT or COMMUNI		AGREEM	ENT NAM	ΛE	
6. NAME (	OF OPERATOR		KERR-MCGEE OIL						7. OPERATOR PHONE					
8. ADDRE	SS OF OPERAT		P.O. Box 173779						9. OPERATOR E-MAI	L	anadarko	20.00		
	AL LEASE NUM		F.O. BOX 173778	11. MII	NERAL OWNERS	SHIP			12. SURFACE OWNER		ganadarko			
	., INDIAN, OR S	UTÚ0576	(C1)	FED	ERAL INC	DIAN 🔵	STATE (	) FEE (		DIAN 📵			EE 💮	
		OWNER (if box 12							14. SURFACE OWNE					
15. ADDR	ESS OF SURFA	CE OWNER (if box	12 = 'fee')						16. SURFACE OWNE	R E-MAIL	(if box 12	! = 'fee')		
	N ALLOTTEE O	R TRIBE NAME			TEND TO COMM IPLE FORMATIO		RODUCTION	FROM	19. SLANT					
( 20% 1.		Ute Tribe		YES	(Submit C	Commingli	ing Applicatio	n) NO	VERTICAL DI	RECTION	AL 🖲 H	HORIZON	ΓAL 🔵	
20. LOC/	ATION OF WELI	-		FOOTAGE	S	QTR	R-QTR	SECTION	TOWNSHIP	R/	ANGE	МЕ	ERIDIAN	
LOCATIO	N AT SURFACI	E	975	FNL 1698	3 FWL	NE	ENW	21	9.0 S	2	1.0 E		S	
Top of U	ppermost Prod	lucing Zone	414	FNL 2152	2 FWL	NE	ENW	21	9.0 S	2	1.0 E		S	
At Total			414	FNL 2152	2 FWL	NE	ENW	21	9.0 S	2	1.0 E		S	
21. COUN	TY	UINTAH		22. DIS	22. DISTANCE TO NEAREST LEASE LINE (Feet) 414				23. NUMBER OF ACR	23. NUMBER OF ACRES IN DRILLING UNIT 1480				
					25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 849				26. PROPOSED DEPT		TVD: 113	36		
27. ELEV	ATION - GROUN			28. BOND NUMBER				29. SOURCE OF DRIL WATER RIGHTS APPR	ROVAL NU		PPLICAB	LE		
		4863		WYB000291  Hole, Casing, and Cement Information						45-0	7490			
String	Hole Size	Casing Size	Length	Weight					Cement	Sacks	Yield	Weight		
Surf	11	8.625	0 - 2930	28.0	J-55 LT	Г&С	0.2	2	Type V		180	1.15	15.8	
	- 0			44.0	1100 110				Class G		270	1.15	15.8	
Prod	7.875	4.5	0 - 11417	11.6	HCP-110	LI&C	12.	5 P	remium Lite High Stre 50/50 Poz	ength	360 1620	1.31	12.0	
									30/30 F0Z		1620	1.31	14.3	
					Α	TTACHN	MENTS							
	VEF	RIFY THE FOLLO	WING ARE ATT	ACHED I	N ACCORDAN	ICE WITH	H THE UTA	H OIL AND GA	AS CONSERVATION O	SENERA	L RULES			
<b>⊮</b> w	ELL PLAT OR M	IAP PREPARED BY	LICENSED SURVE	YOR OR EI	NGINEER		<b>✓</b> COMP	LETE DRILLING	PLAN					
AF	FIDAVIT OF ST	ATUS OF SURFACE	OWNER AGREEN	IENT (IF FE	EE SURFACE)		FORM	5. IF OPERATO	R IS OTHER THAN THE L	EASE OW	NER			
<b>I</b> ✓ DII	RECTIONAL SU	RVEY PLAN (IF DIR	ECTIONALLY OR	HORIZON	TALLY DRILLED	)	торос	GRAPHICAL MA	P					
NAME D	anielle Piernot			TITLE R	egulatory Analys	t		PHONE 7	20 929-6156					
SIGNATU	RE			DATE 02	2/12/2013			EMAIL da	nielle.piernot@anadarko.	com				
	BER ASSIGNED 047536060			APPROV	/AL			B	00.gjill					
								Per	mit Manager					

### Kerr-McGee Oil & Gas Onshore. L.P.

NBU 921-21C1CS

Surface: 975 FNL / 1698 FWL NENW BHL: 414 FNL / 2152 FWL NENW

Section 21 T9S R21E

Unitah County, Utah Mineral Lease: UTU 0576

**ONSHORE ORDER NO. 1** 

#### **DRILLING PROGRAM**

### 1. & 2.a <u>Estimated Tops of Important Geologic Markers:</u> <u>Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:</u>

<u>Formation</u>	<u>Depth</u>	<u>Resource</u>
Uinta	0 - Surface	
Green River	1,644'	
Birds Nest	1,987'	Water
Mahogany	2,484'	Water
Wasatch	5,050'	Gas
Mesaverde	7,986'	Gas
Sego	10,239'	Gas
Castlegate	10,349'	Gas
Blackhawk	10,736'	Gas
TVD =	11,336'	
TD =	11,417'	

2.c Kerr McGee Oil & Gas Onshore LP (Kerr McGee) may elect to drill to (i) the Blackhawk formation (part of the Mesaverde Group), (ii) to a shallower depth within the Mesaverde Group, or (iii) to the Wasatch Formation. If Kerr McGee drills to the Blackhawk formation, please refer to Blackhawk as the bottom formation. The attached Blackhawk Drilling Program includes Total Vertical Depth, Total Depth, and appropriate casing and cement programs for the deeper formation.

If Kerr-McGee drills to a shallower depth in the Mesaverde Group or to the Wasatch Formation, please refer to the attached Wasatch/Mesaverde Drilling Program which includes Total Vertical Depth, Total Depth, and appropriate casing and cement programs for the shallower formations.

### 3. <u>Pressure Control Equipment</u> (Schematic Attached)

Please refer to the attached Blackhawk Drilling Program and the Wasatch/Mesaverde Drilling Program

### 4. Proposed Casing & Cementing Program:

Please refer to the attached Blackhawk Drilling Program and the Wasatch/Mesaverde Drilling Program

### 5. <u>Drilling Fluids Program</u>:

Please refer to the attached Blackhawk Drilling Program and the Wasatch/Mesaverde Drilling Program

### 6. Evaluation Program:

Please refer to the attached Blackhawk Drilling Program and the Wasatch/Mesaverde Drilling Program

### 7. Abnormal Conditions:

### 7.a Blackhawk (Part of Mesaverde Group)

Maximum anticipated bottom hole pressure calculated at 11336' TVD, approximately equals 7,255 psi (0.64 psi/ft = actual bottomhole gradient)

Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

Maximum anticipated surface pressure equals approximately 4,745 psi (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

Per Onshore Order No. 2 - Max Anticipated Surf. Press.(MASP) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point))

### 7.b Wasach Formation/Mesaverde Group

Maximum anticipated bottom hole pressure calculated at 10239' TVD, approximately equals 6,246 psi (0.61 psi/ft = actual bottomhole gradient)

Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

Maximum anticipated surface pressure equals approximately 4,020 psi (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

Per Onshore Order No. 2 - Max Anticipated Surf. Press.(MASP) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point))

### 8. Anticipated Starting Dates:

Drilling is planned to commence immediately upon approval of this application.

#### 9. Variances:

Please refer to the attached Blackhawk Drilling Program and the Wasatch/Mesaverde Drilling Program Onshore Order #2 – Air Drilling Variance

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- · Blowout Prevention Equipment (BOPE) requirements;
- · Mud program requirements; and
- Special drilling operation (surface equipment placement) requirements associated with air drilling.

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

### Background

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Rird's Nest

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may

be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12 1/4 inch hole for the first 200 feet, then will drill a 11 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 11 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 8-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

### Variance for BOPE Requirements

The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

#### Variance for Mud Material Requirements

Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

### Variance for Special Drilling Operation (surface equipment placement) Requirements

Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooic line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooic line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

### Variance for FIT Requirements

KMG also respectfully requests a variance to Onshore Order 2, Section III, Part Bi, for the pressure integrity test (PIT, also known as a formation integrity test (FIT)). This well is not an exploratory well and is being drilled in an area where the formation integrity is well known. Additionally, when an FIT is run with the mud weight as required, the casing shoe frequently breaks down and causes subsequent lost circulation when drilling the entire depth of the well.

### Conclusion

The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

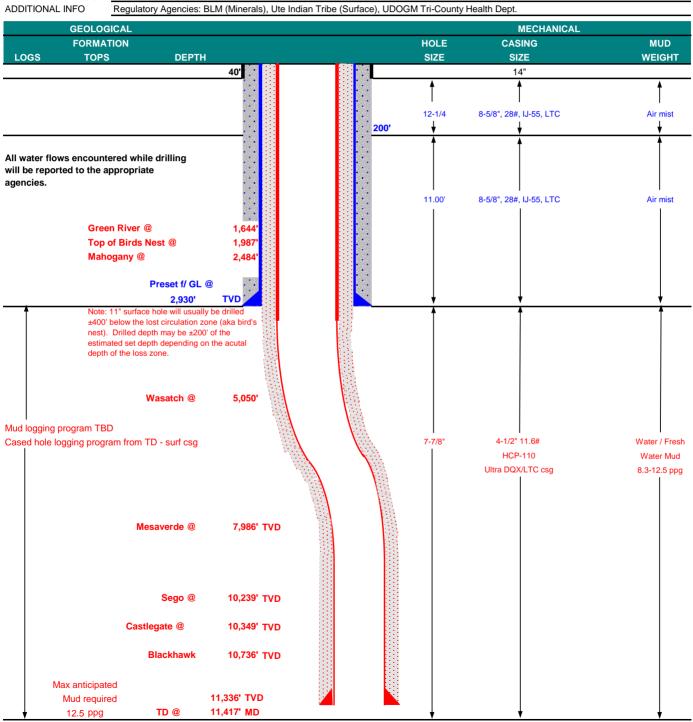
### 10. Other Information:

Please refer to the attached Blackhawk Drilling Program and the Wasatch/Mesaverde Drilling Program



# KERR-McGEE OIL & GAS ONSHORE LP Blackhawk Drilling Program

COMPANY NAME KERI	R-McGEE OIL &	GAS ONSHORI	E LP		DATE	July 9, 201	2	
WELL NAME NBU	J 921-21C1C	S			TD	11,336'	TVD	11,417' MD
FIELD Natural Buttes	3	COUNTY	Uintah S	TATE Utal	1	FINIS	HED ELEVATION_	4,863'
SURFACE LOCATION	NENW	975 FNL	1698 FWL	Sec 21	T 9S	R 21E		
	Latitude:	40.026160	Longitude:	-109.560	0107		NAD 83	
BTM HOLE LOCATION	NENW	414 FNL	2152 FWL	Sec 21	T 9S	R 21E		
	Latitude:	40.027700	Longitude:	-109.558	3488		NAD 83	
OBJECTIVE ZONE(S)	BLACKHAWK	(Part of the Mesa	averde Group)					
ADDITIONAL INFO	Regulatory Age	encies: BLM (Min	erals), Ute India	n Tribe (Su	rface), U	DOGM Tri-Cou	nty Health Dept.	





# KERR-McGEE OIL & GAS ONSHORE LP Blackhawk Drilling Program

CASING PROGRAI	<u>vi</u>								DESIGN	FACTORS	
										LTC	DQX
	SIZE	INT	ERVA	L	WT.	GR.	CPLG.	BURST	COLLAPSE	TEN	ISION
CONDUCTOR	14"	(	0-40'								
								3,390	1,880	348,000	N/A
SURFACE	8-5/8"	0	to	2,930	28.00	IJ-55	LTC	1.84	1.37	4.84	N/A
								10,690	8,650	279,000	367,174
PRODUCTION	4-1/2"	0	to	5,000	11.60	HCP-110	DQX	1.19	1.17		3.43
	4-1/2"	5,000	to	11,417'	11.60	HCP-110	LTC	1.19	1.17	4.63	

**Surface Casing:** 

(Burst Assumptions: TD = 12.5 ppg) 0.73 psi/ft = frac gradient @ surface shoe

Fracture at surface shoe with 0.1 psi/ft gas gradient above

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing\*Buoy.Fact. of water)

Production casing:

(Burst Assumptions: Pressure test with 8.4ppg @ 9000 psi) 0.64 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing\*Buoy.Fact. of water)

### **CEMENT PROGRAM**

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500'	Premium cmt + 2% CaCl	180	60%	15.80	1.15
Option 1			+ 0.25 pps flocele				
TOP OUT CMT	(6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	270	0%	15.80	1.15
			+ 2% CaCl + 0.25 pps flocele				
SURFACE			NOTE: If well will circulate water	to surface, o	ption 2 will b	oe utilized	
Option 2	LEAD	2,430'	65/35 Poz + 6% Gel + 10 pps gilsonite	220	35%	11.00	3.82
			+ 0.25 pps Flocele + 3% salt BWOW				
	TAIL	500'	Premium cmt + 2% CaCl	150	35%	15.80	1.15
			+ 0.25 pps flocele				
TOP O	UT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15
PRODUCTION	LEAD	4,547'	Premium Lite II +0.25 pps	360	35%	12.00	3.38
			celloflake + 5 pps gilsonite + 10% gel				
			+ 0.5% extender				
	TAIL	6,870'	50/50 Poz/G + 10% salt + 2% gel	1,620	35%	14.30	1.31
			+ 0.1% R-3				

<sup>\*</sup>Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

### FLOAT EQUIPMENT & CENTRALIZERS

SURFACE Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe

PRODUCTION Float shoe, 1 jt, float collar. 15 centralizers for a Mesaverde and 20 for a Blackhawk well.

1 centralizer on the first 3 joints and one every third joint thereafter.

### ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

Surveys will be taken at	1,000' minimum intervals

Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

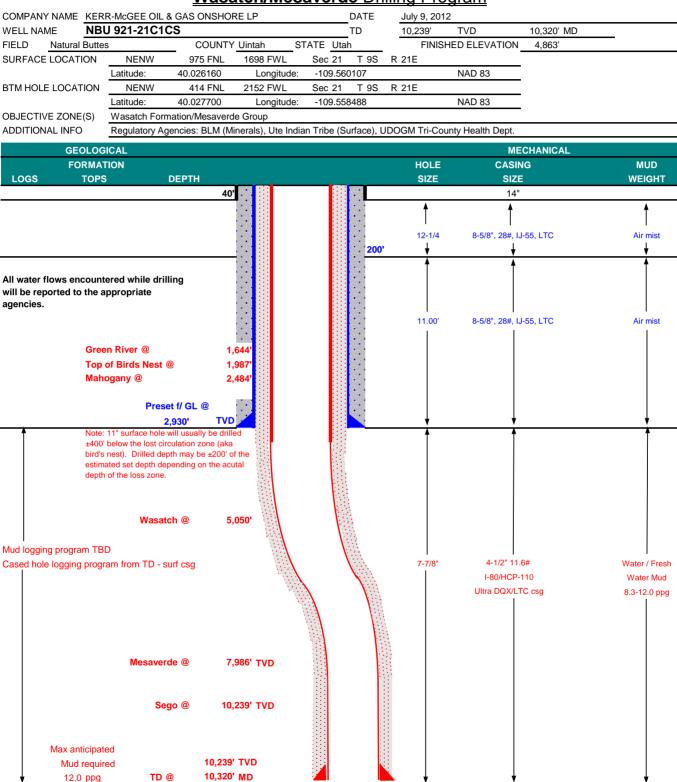
DRILLING ENGINEER:		DATE:	
	Nick Spence / Danny Showers / Travis Hansell	_	
DRILLING SUPERINTENDENT:		DATE:	

Kenny Gathings / Lovel Young

<sup>\*</sup>Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained



# KERR-McGEE OIL & GAS ONSHORE LP Wasatch/Mesaverde Drilling Program





# KERR-McGEE OIL & GAS ONSHORE LP Wasatch/Mesaverde Drilling Program

CASING PROGRAI	<u>M</u>								DESIGN	FACTORS	
										LTC	DQX
	SIZE	INTI	ERVA	L	WT.	GR.	CPLG.	BURST	COLLAPSE	TEN	ISION
CONDUCTOR	14"	C	-40'								
								3,390	1,880	348,000	N/A
SURFACE	8-5/8"	0	to	2,930	28.00	IJ-55	LTC	1.84	1.37	4.84	N/A
								7,780	6,350		267,035
PRODUCTION	4-1/2"	0	to	5,000	11.60	I-80	DQX	1.11	0.99		2.73
								10,690	8,650	223,000	
	4-1/2"	5,000	to	10,320'	11.60	HCP-110	LTC	1.53	1.35	4.42	

**Surface Casing:** 

(Burst Assumptions: TD = 12.0 ppg) 0.73 psi/ft = frac gradient @ surface shoe

Fracture at surface shoe with 0.1 psi/ft gas gradient above

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing\*Buoy.Fact. of water)

Production casing:

(Burst Assumptions: Pressure test with 8.4ppg @ 7000 psi) 0.61 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing\*Buoy.Fact. of water)

### **CEMENT PROGRAM**

	FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGH	-IT	YIELD
SURFACE LEAD	500'	Premium cmt + 2% CaCl	180	60%	15.80		1.15
Option 1		+ 0.25 pps flocele					
TOP OUT CMT (6 jobs	1,200'	20 gals sodium silicate + Premium cmt	270	0%	15.80		1.15
		+ 2% CaCl + 0.25 pps flocele					
SURFACE		NOTE: If well will circulate water	to surface, o <sub>l</sub>	otion 2 will b	e utilized		
Option 2 LEAD	2,430'	65/35 Poz + 6% Gel + 10 pps gilsonite	220	35%	11.00		3.82
		+ 0.25 pps Flocele + 3% salt BWOW					
TAIL	500'	Premium cmt + 2% CaCl	150	35%	15.80		1.15
		+ 0.25 pps flocele					
TOP OUT CM	as required	Premium cmt + 2% CaCl	as req.		15.80		1.15
PRODUCTION LEAD	4,550'	Premium Lite II +0.25 pps	360	35%	12.00		3.38
		celloflake + 5 pps gilsonite + 10% gel					
		+ 0.5% extender					
TAIL	5,770'	50/50 Poz/G + 10% salt + 2% gel	1,360	35%	14.30		1.31
		+ 0.1% R-3					

 $<sup>{}^{\</sup>star}\text{Substitute}$  caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

### FLOAT EQUIPMENT & CENTRALIZERS

SURFACE

Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe

PRODUCTION

Float shoe, 1 jt, float collar. 15 centralizers for a Mesaverde and 20 for a Blackhawk well.

1 centralizer on the first 3 joints and one every third joint thereafter.

### ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

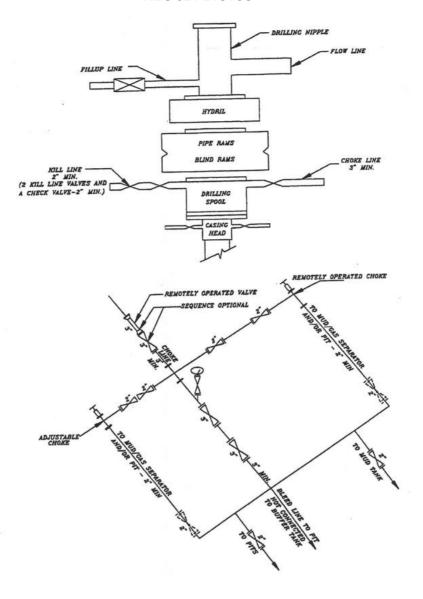
Surveys will be taken at 1,000' minimum intervals.

Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

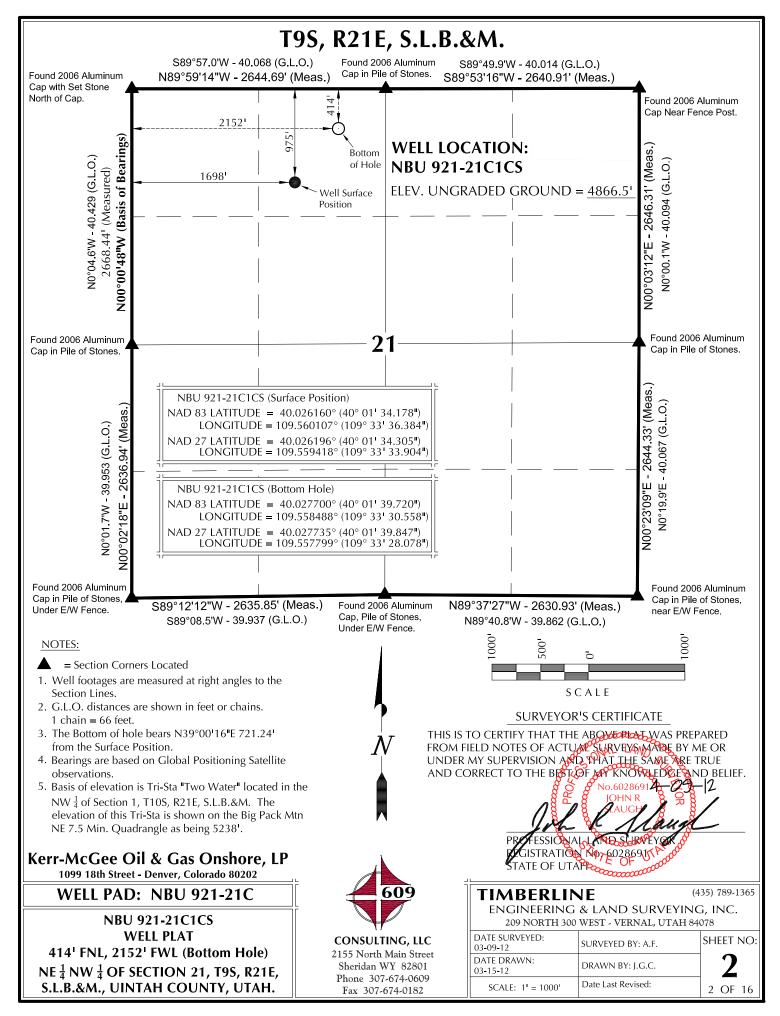
DRILLING ENGINEER:		DATE:	
	Nick Spence / Danny Showers / Travis Hansell		
DRILLING SUPERINTENDENT:		DATE:	
	Kenny Gathings / Lovel Young		

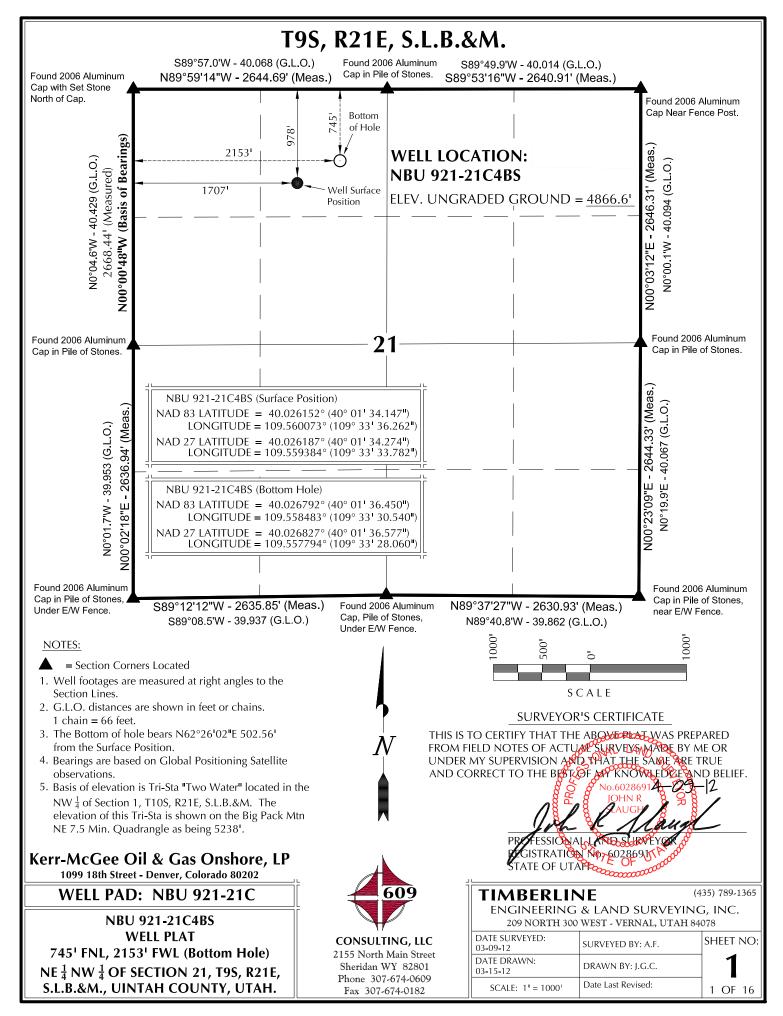
<sup>\*</sup>Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

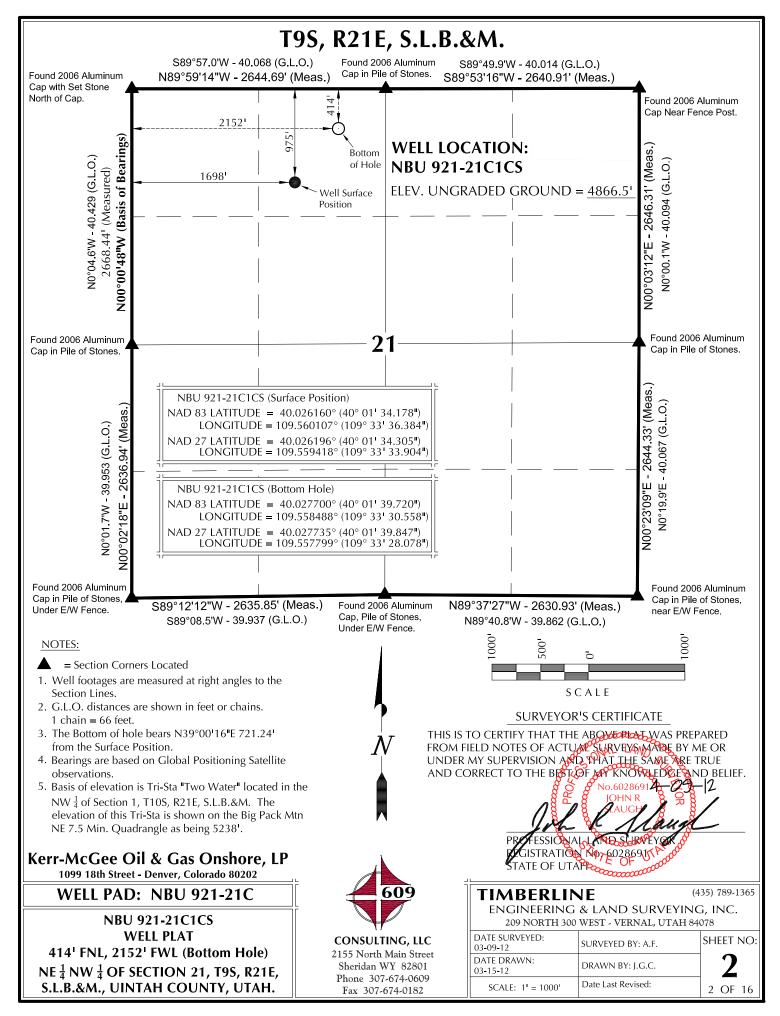
## EXHIBIT A NBU 921-21C1CS

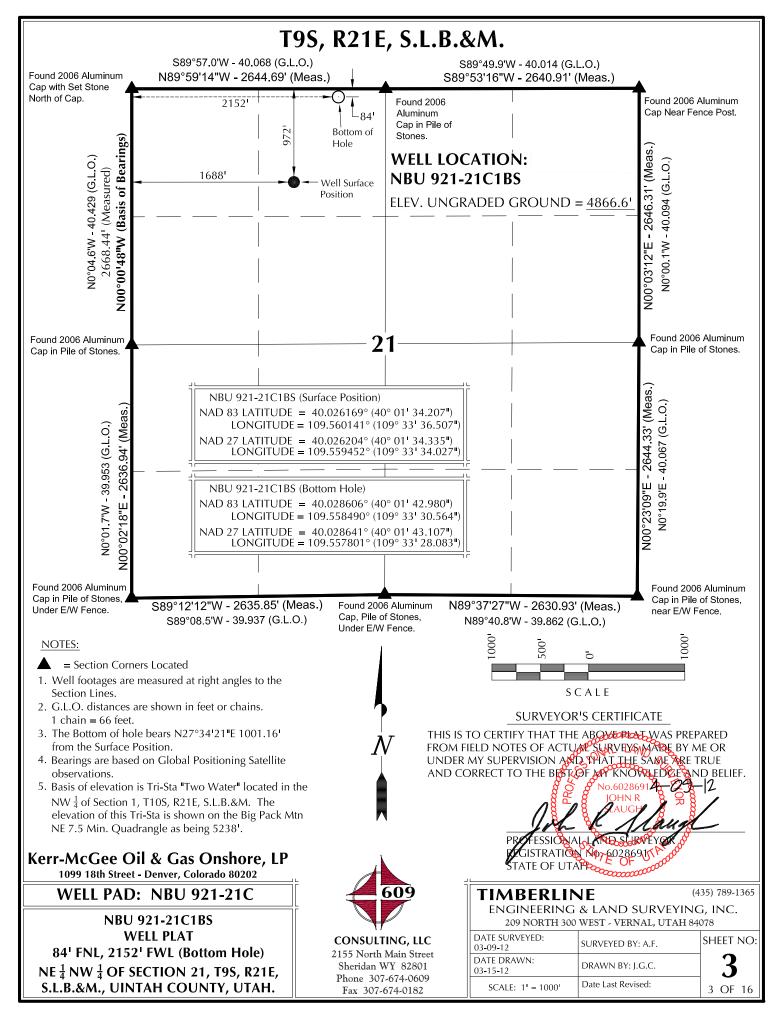


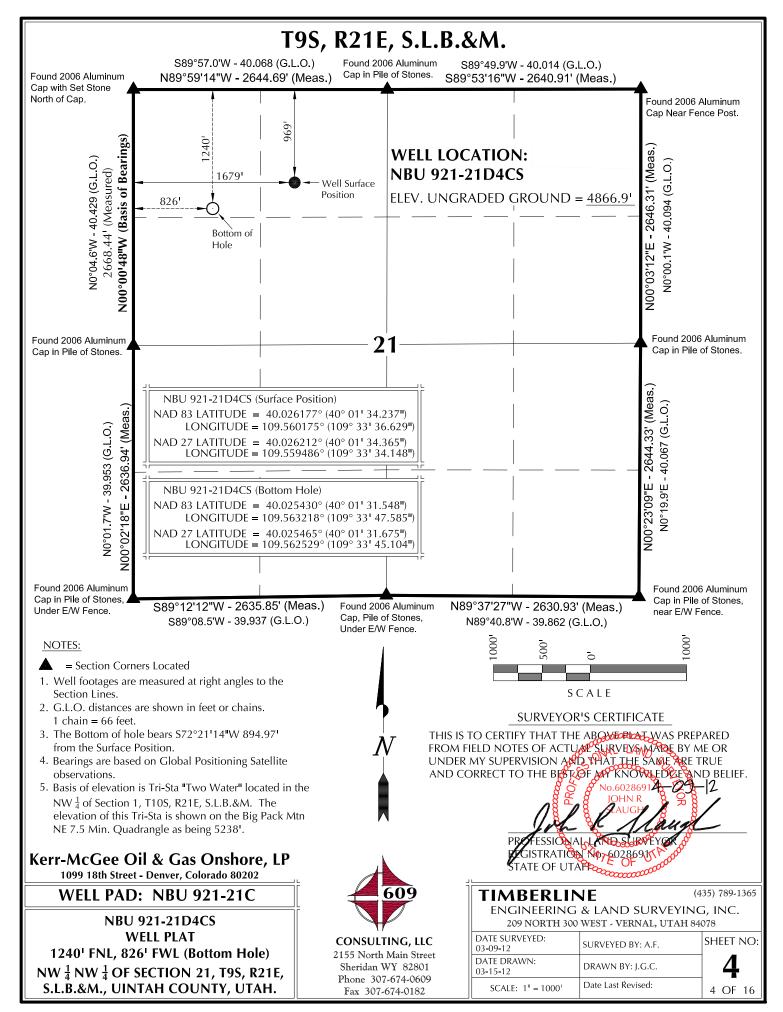
SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK



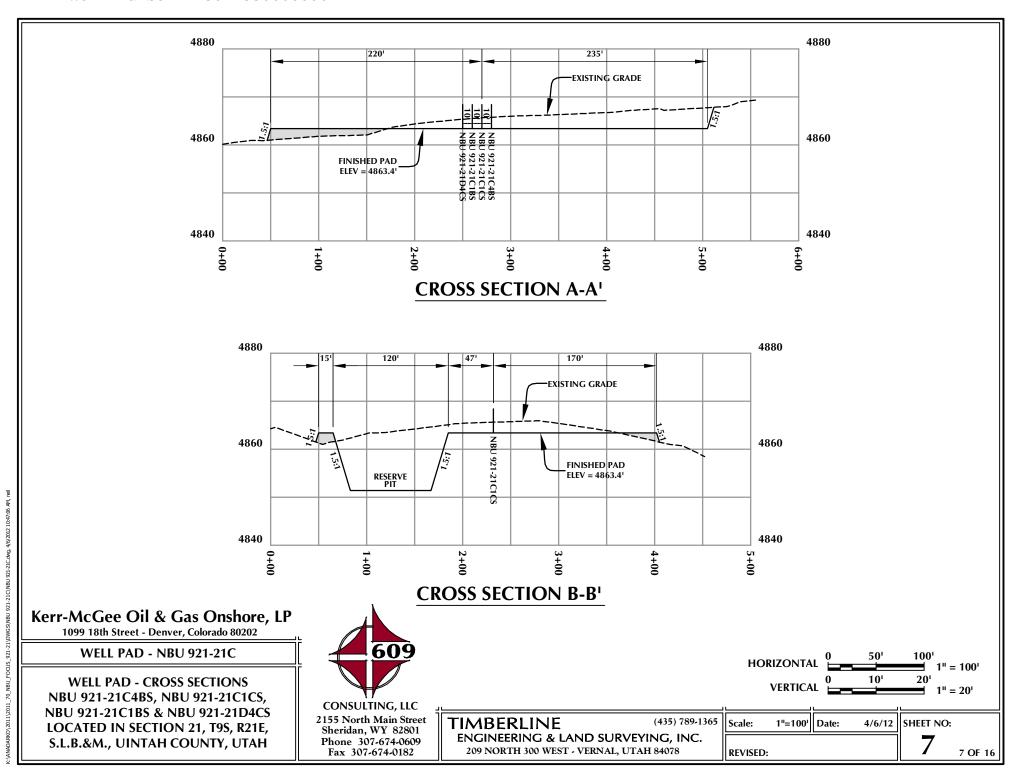


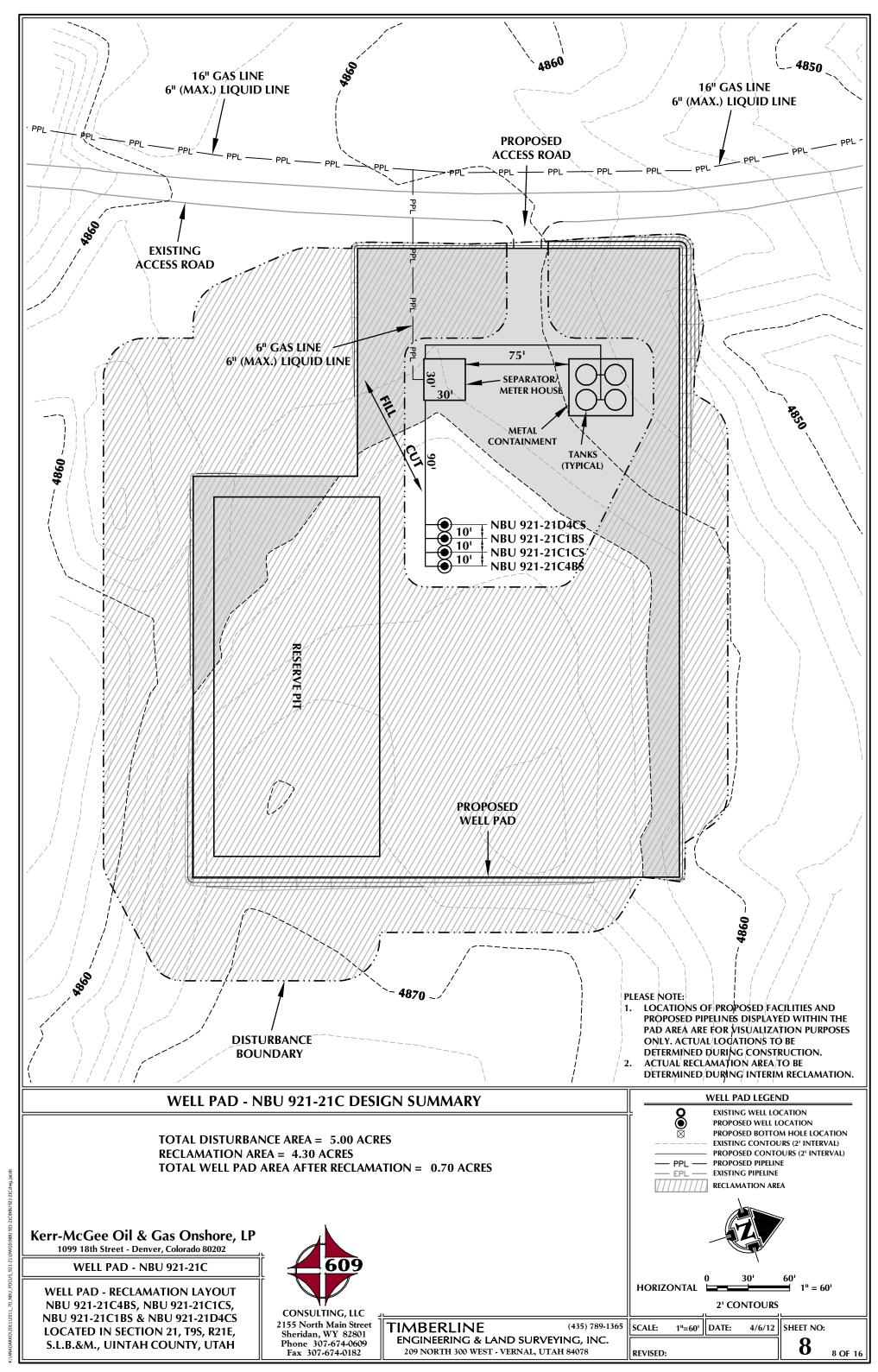






			SURFACE POS	SITION					В	OTTOM HOLE		
WELL NAME		D83	IDE LATITU	NAD27	ITUDE	FOOT / CTC	1 4 777	NAD		NAI		FOOTAGES
NBU	<b>LATITUDE</b> 40°01'34.147'	LONGITU 109°33'36.				FOOTAGES 978' FNL	_		<b>LONGITUDE</b> 109°33'30.540"	<b>LATITUDE</b> 40°01'36.577"	<b>LONGITUDE</b> 109°33'28.060"	745' FNL
921-21C4BS	40.026152°	109.56007	3° 40.02618	7° 109.559		1707' FWL	40.026	792°	109.558483°	40.026827°	109.557794°	21531 FWL
NBU	40°01'34.178'	1.00 00 001				975' FNL	40°01'3		109°33'30.558"	40°01'39.847"	109°33'28.078"	414' FNL
921-21C1CS NBU	40.026160° 40°01'34.207'	109.56010 109°33'36.				1698' FWL 972' FNL	40.027 40°01'4		109.558488° 109°33'30.564"	40.027735° 40°01'43.107"	109.557799° 109°33'28.083"	2152' FWL 84' FNL
921-21C1BS	40.026169°	109.56014				1688' FWL	40.028		109.558490°	40.028641°	109.557801°	2152' FWL
NBU 921-21D4CS	40°01'34.237' 40.026177°	1.00 00 001				969' FNL			109°33'47.585"	40°01'31.675"	109°33'45.104"	1240' FNL
921-2104C5	40.026177	109.56017		2°  109.559		1679' FWL	40.025		109.563218°	40.025465°	109.562529°	826' FWL
WELL NAME	NORTH	EAST	WELL NAME	NORTH	EAST		NAME	NORT		WELL NAM	IE NORTH	EAST
NBU 921-21C4BS	232.6	445.5'	NBU 921-21C1CS	560.5	453.9	NBU	1C1BS	887.		NBU 921-21D4C	-271 3'	-852.9
	.09	S C A	LE  172°15'37" V  287.73972			10, 10,			(10 8/11/16/20) (10 8/11/16/20) (10 1/11/16/20)	·	12,2 <sup>th</sup> 12,	
WELL	8th Street - De L PAD -   PAD INTE	& Gas C enver, Color NBU 92 ERFEREN	21-21C	_P		NBU 921-21 NBU 921-21 NBU 921-21		E	OF THE NV S.L.B.&M. V GLOBAL PC OBSERVATI OBSERVATI  MBERL NGINEERIN 209 NORTH 3	V 1 OF SECTIC VHICH IS TAK DSITIONING S IONS TO BEAI	SATELLITE R N00°00'48"V  (4: SURVEYING RNAL, UTAH 840	35) 789-1365 i, INC.
WELLS - NI NBU 92 LOCAT		4BS, NBU & NBU 92 ION 21,	J 921-21C1C 21-21D4CS T9S, R21E,		2155 Nor Sherida Phone	J <b>LTING, LI</b> rth Main Str n WY 8280 307-674-060 07-674-0182	eet 1 )9	03-09 DATE 03-15	SURVEYED: 0-12 DRAWN:	SURVEYED E  DRAWN BY:  Date Last Rev	BY: A.F. J.G.C.	SHEET NO $oldsymbol{5}$





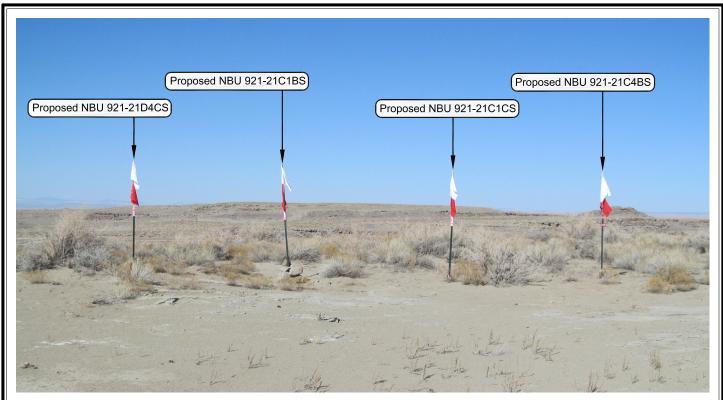


PHOTO VIEW: FROM PIT CORNER D TO LOCATION STAKE

CAMERA ANGLE: NORTHEASTERLY



PHOTO VIEW: FROM BEGINNING OF PROPOSED ROAD

**CAMERA ANGLE: EASTERLY** 

(435) 789-1365

### Kerr-McGee Oil & Gas Onshore, LP 1099 18th Street - Denver, Colorado 80202

### WELL PAD - NBU 921-21C

**LOCATION PHOTOS** NBU 921-21C4BS, NBU 921-21C1CS, NBU 921-21C1BS & NBU 921-21D4CS LOCATED IN SECTION 21, T9S, R21E, S.L.B.&M., UINTAH COUNTY, UTAH.

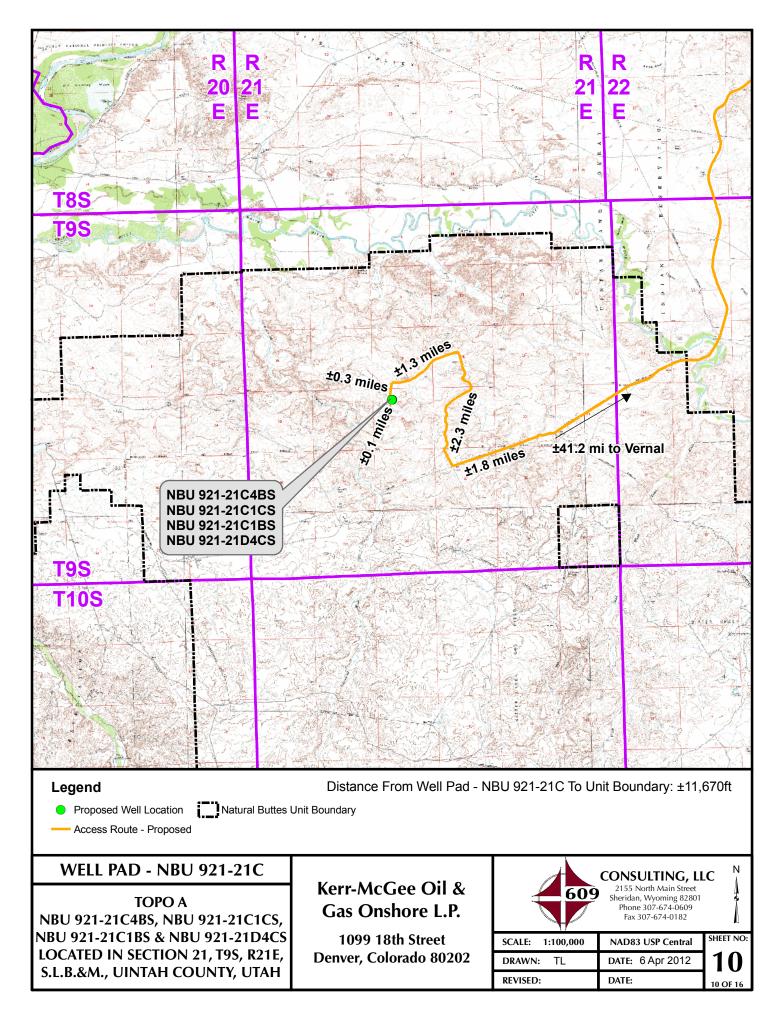


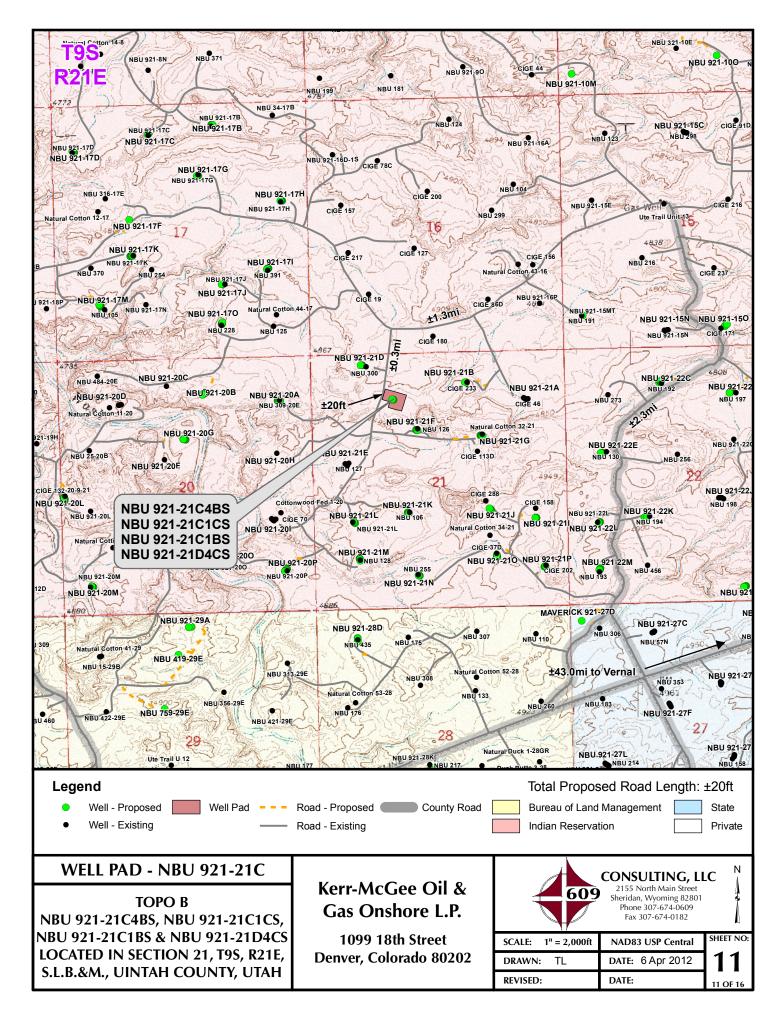
### CONSULTING, LLC 2155 North Main Street Sheridan WY 82801 Phone 307-674-0609 Fax 307-674-0182

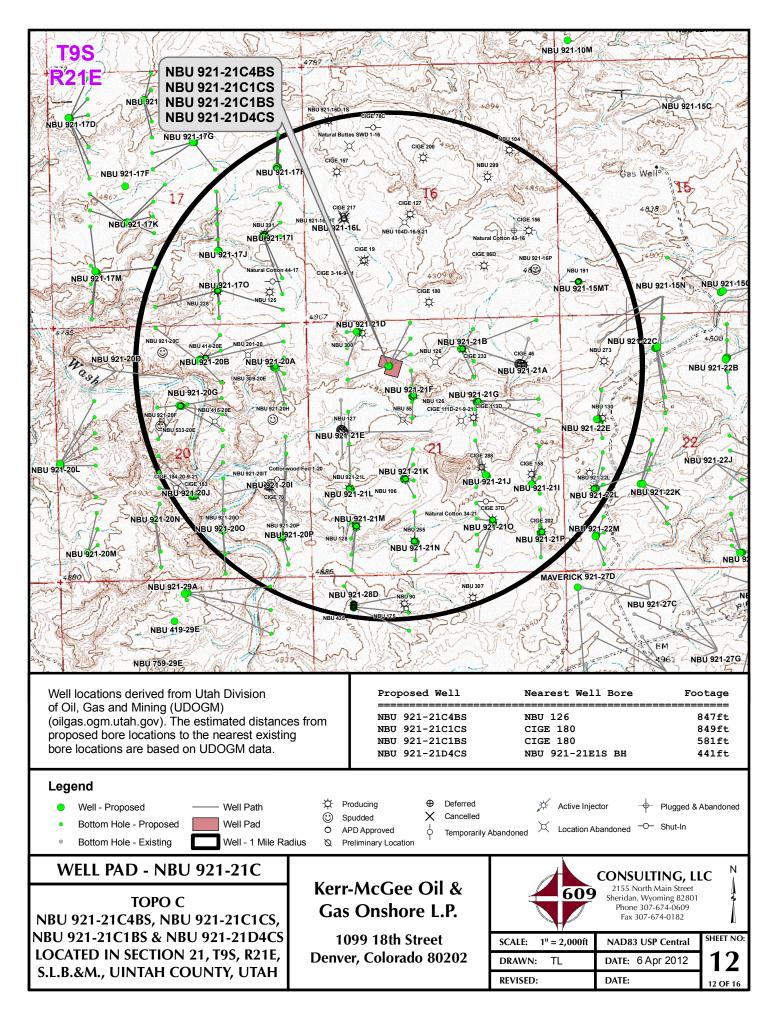
### TIMBERLINE ENGINEERING & LAND SURVEYING, INC. 209 NORTH 300 WEST - VERNAL, UTAH 84078

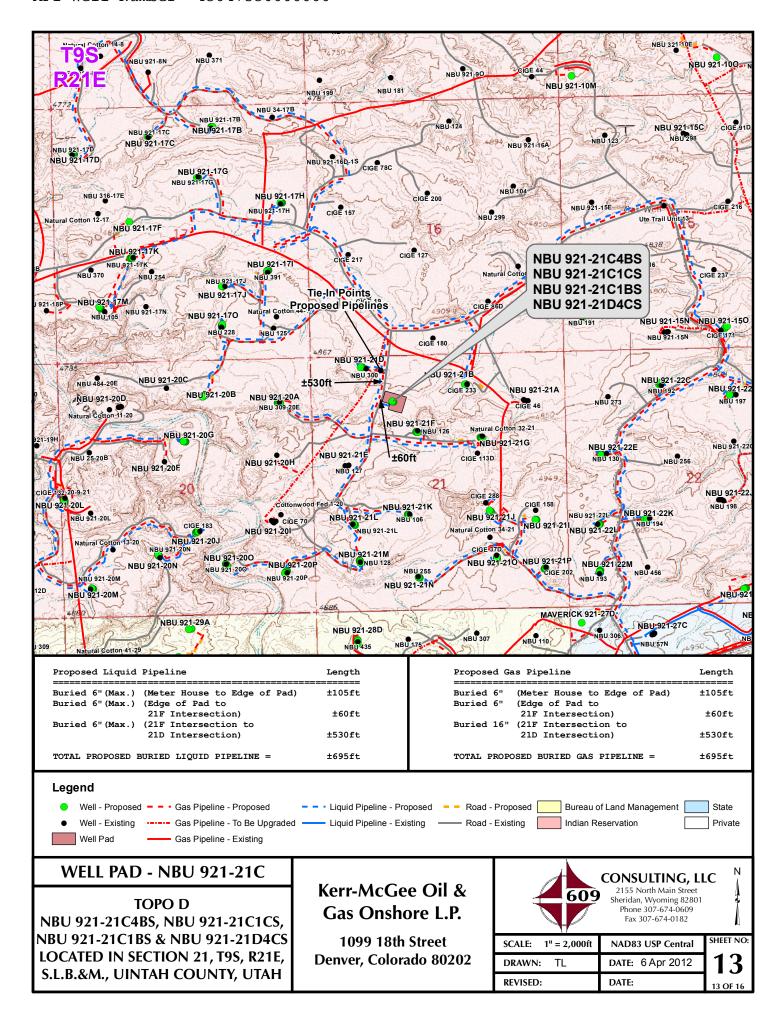
DATE PHOTOS TAKEN: SHEET NO: PHOTOS TAKEN BY: A.F. 03-09-12 DATE DRAWN: DRAWN BY: J.G.C. 03-15-12

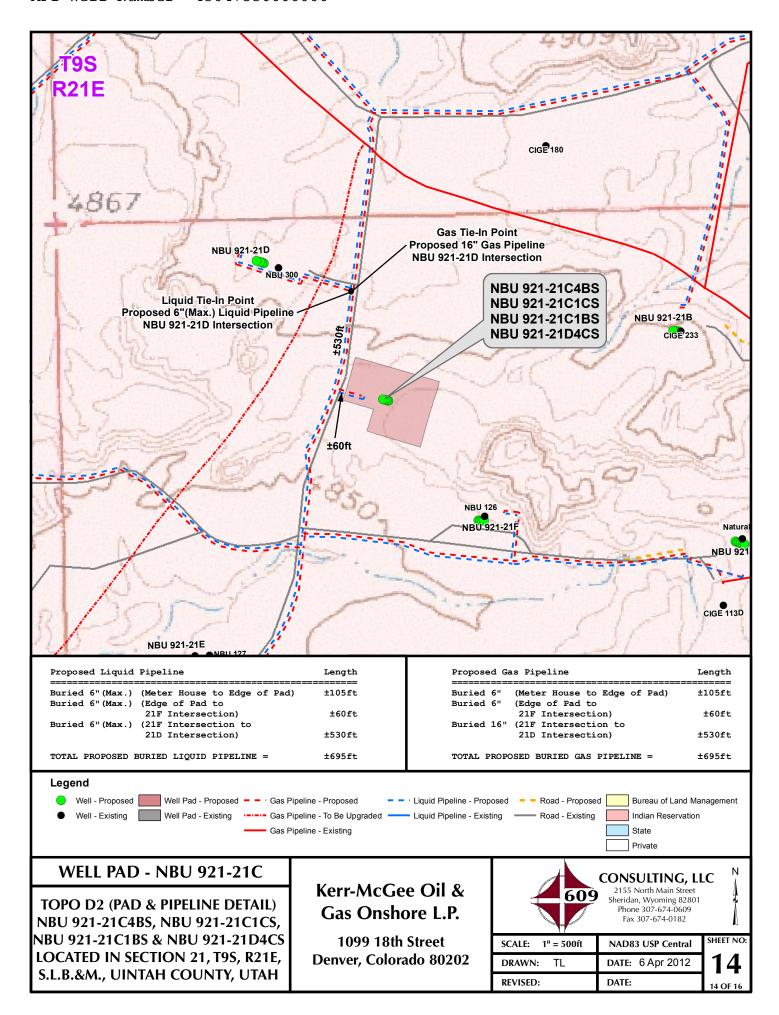
Date Last Revised: 9 OF 16

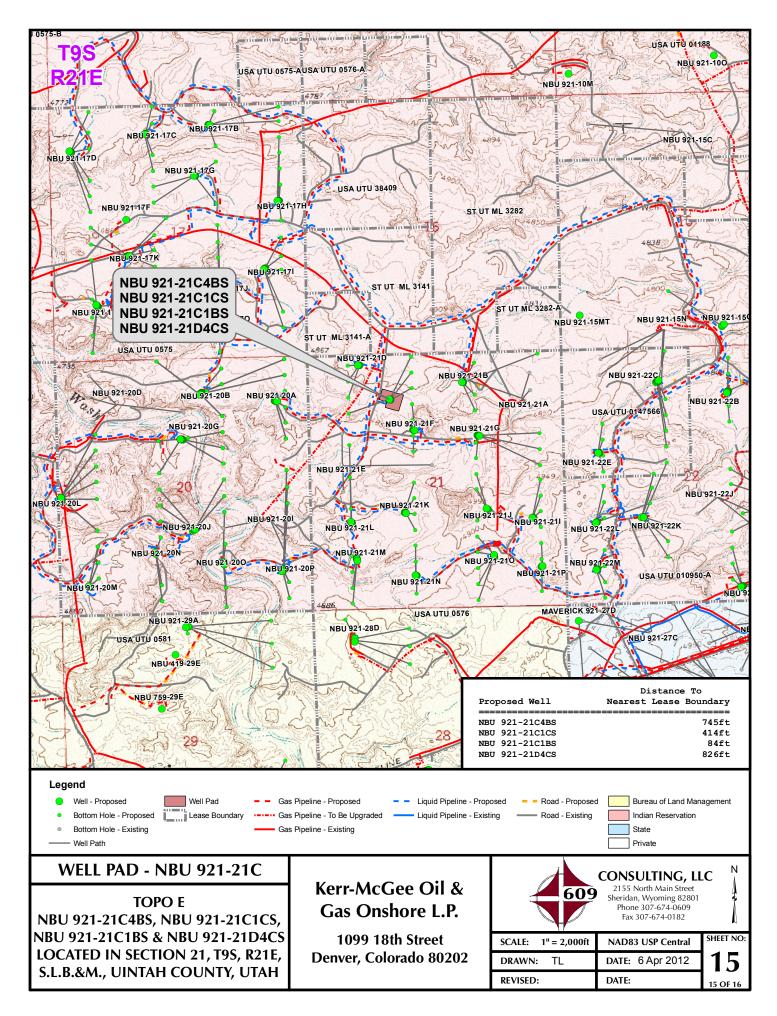












### Kerr-McGee Oil & Gas Onshore, LP WELL PAD - NBU 921-21C WELLS - NBU 921-21C4BS, NBU 921-21C1CS, NBU 921-21C1BS & NBU 921-21D4CS Section 21, T9S, R21E, S.L.B.&M.

From the intersection of U.S. Highway 40 and 500 East Street in Vernal, Utah, proceed in an easterly, then southerly direction along U.S. Highway 40 approximately 3.3 miles to the junction of State Highway 45. Exit right and proceed in a southerly direction along State Highway 45 approximately 20.2 miles to the junction of the Glen Bench Road (County B Road 3260). Exit right and proceed in a southwesterly direction along the Glen Bench Road approximately 17.7 miles to a Class D County Road to the southwest. Exit right and proceed in a southwesterly direction along the Class D County Road approximately 1.8 miles to a second Class D County Road to the north. Exit right and proceed in a northerly direction along the second Class D County Road approximately 2.3 miles to a Tribal Road to the southwest. Continue in a southwesterly direction along the Tribal Road approximately 1.3 miles to a service road to the south. Exit left and proceed in a southerly direction along the service road approximately 0.3 miles to the proposed access road to the east. Follow road flags in an easterly direction approximately 20 feet to the proposed well location.

Total distance from Vernal, Utah to the proposed well location is approximately 46.9 miles in a southerly direction.

**SHEET 16 OF 16** 

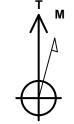
API Well Number: 4304750601:600040-UTM (feet), NAD27, Zone 12N Scientific Drilling

Site: NBU 921-21C PAD Well: NBU 921-21C1CS

Wellbore: OH

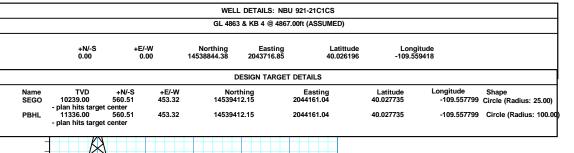
Design: PLAN #1 PRELIMINARY





Azimuths to True North Magnetic North: 10.99°

> Magnetic Field Strength: 52250.2snT Dip Angle: 65.86° Date: 2012/04/25 Model: IGRF2010



-750

1500

Vertical Section at 38.96° (1500 ft/in)

2250

3750

0 300.00 Start Build 2.00 700 Start 2226.06 hold at 1000.00 MD SEGO NBU 921-21C1CS 750 993.06 **GREEN RIVER** 600 1500 BIRDSNEST MAHOGANY 500 8 5/8" 2250 South(-)/North(+) (200 ft/in) 400 3152.99 624 3000 Start Drop -1.75 PBHL\_NBU 921-21C1CS 300 3750 3945.06 721 Start 7390.94 hold at 4026.06 MD 200 WASATCH True Vertical Depth (1500 ft/in) 4500 100 5250 O 6000 -100 6750 200 300 600 100 400 500 0 West(-)/East(+) (200 ft/in) MESAVERDE 7500 SECTION DETAILS 8250 MD 0.00 300.00 1000.00 3226.06 4026.06 TVD 0.00 300.00 993.06 3152.99 3945.06 +N/-S 0.00 0.00 66.17 484.90 560.51 +E/-W 0.00 0.00 53.51 392.16 453.32 Azi 0.00 0.00 38.96 38.96 0.00 Dleg 0.00 0.00 2.00 0.00 1.75 0.00 TFace 0.00 0.00 38.96 0.00 180.00 Inc 0.00 0.00 14.00 14.00 0.00 0.00 0.00 0.00 85.10 623.63 720.88 720.88 9000 PBHL\_NBU 921-21C1CS SEGO\_NBU 921-21C1CS FORMATION TOP DETAILS Formation
GREEN RIVER
BIRDSNEST
MAHOGANY
WASATCH
MESAVERDE
SEGO
CASTLEGATE
BLACKHAWK TVDPath 1644.00 9750 SEGO PROJECT DETAILS: UTAH - UTM (feet), NAD27, Zone 12N 1644.00 1987.00 2484.00 5050.00 7986.00 10239.00 10349.00 2024.37 2536.59 5131.01 8067.01 **CASTLEGATE** Geodetic System: Universal Transverse Mercator (US Survey Feet)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: Zone 12N (114 W to 108 W)
Location: SECTION 21 T9S R21E 10320.01 10430.01 10500 **BLACKHAWK** System Datum:Mean Sea Level 10736.00 BLACKHAWK CASING DETAILS 11336.00721 11250 MD 3000.36 Name Size 8 5/8" 8.625 TD at 11417.01 12000

Plan: PLAN #1 PRELIMINARY (NBU 921-21C1CS/OH)

Created By: RobertScott Date: 11:39, June 14 2012



### **US ROCKIES REGION PLANNING**

UTAH - UTM (feet), NAD27, Zone 12N NBU 921-21C PAD NBU 921-21C1CS

ОН

Plan: PLAN #1 PRELIMINARY

## **Standard Planning Report**

14 June, 2012





# **SDI**Planning Report



Database: EDM5000-RobertS-Local

Company: US ROCKIES REGION PLANNING
Project: UTAH - UTM (feet), NAD27, Zone 12N

 Site:
 NBU 921-21C PAD

 Well:
 NBU 921-21C1CS

Wellbore: OH

Design: PLAN #1 PRELIMINARY

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

**Survey Calculation Method:** 

Well NBU 921-21C1CS

GL 4863 & KB 4 @ 4867.00ft (ASSUMED) GL 4863 & KB 4 @ 4867.00ft (ASSUMED)

True

Minimum Curvature

Project UTAH - UTM (feet), NAD27, Zone 12N

Map System: Universal Transverse Mercator (US Survey Feet)

Geo Datum: NAD 1927 (NADCON CONUS)

Map Zone: Zone 12N (114 W to 108 W)

Mean Sea Level

Site NBU 921-21C PAD, SECTION 21 T9S R21E

Northing: 14,538,847.14 usft Site Position: Latitude: 40.026204 From: Lat/Long Easting: 2,043,707.28 usft Longitude: -109.559452 **Position Uncertainty:** 0.00 ft Slot Radius: **Grid Convergence:** 0.93 13.200 in

System Datum:

O.00 it Slot Radius. 15.200 iii Slid Convergence. 0.

Well NBU 921-21C1CS, 975 FNL 1698 FWL

 Well Position
 +N/-S
 -2.91 ft
 Northing:
 14,538,844.38 usft
 Latitude:
 40.026196

 +E/-W
 9.52 ft
 Easting:
 2,043,716.85 usft
 Longitude:
 -109.559418

Position Uncertainty0.00 ftWellhead Elevation:Ground Level:4,863.00 ft

Wellbore ОН Magnetics **Model Name** Sample Date Declination Dip Angle Field Strength (nT) (°) (°) 2012/04/25 IGRF2010 10.99 65.86 52.250

PLAN #1 PRELIMINARY Design Audit Notes: Version: Phase: PLAN Tie On Depth: 0.00 **Vertical Section:** Depth From (TVD) +N/-S +E/-W Direction (ft) (ft) (ft) (°) 0.00 0.00 0.00 38.96

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,000.00	14.00	38.96	993.06	66.17	53.51	2.00	2.00	0.00	38.96	
3,226.06	14.00	38.96	3,152.99	484.90	392.16	0.00	0.00	0.00	0.00	
4,026.06	0.00	0.00	3,945.06	560.51	453.32	1.75	-1.75	0.00	180.00	
11,417.01	0.00	0.00	11,336.00	560.51	453.32	0.00	0.00	0.00	0.00 PE	3HL_NBU 921-210



# **SDI**Planning Report



Database: EDM5000-RobertS-Local

Company: US ROCKIES REGION PLANNING

Project: UTAH - UTM (feet), NAD27, Zone 12N

 Site:
 NBU 921-21C PAD

 Well:
 NBU 921-21C1CS

Wellbore: OH

Design: PLAN #1 PRELIMINARY

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

**Survey Calculation Method:** 

Well NBU 921-21C1CS

GL 4863 & KB 4 @ 4867.00ft (ASSUMED) GL 4863 & KB 4 @ 4867.00ft (ASSUMED)

True

lanned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00 100.00 200.00 300.00 Start Build 2	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 100.00 200.00 300.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
400.00	2.00	38.96	399.98	1.36	1.10	1.75	2.00	2.00	0.00
500.00	4.00	38.96	499.84	5.43	4.39	6.98	2.00	2.00	0.00
600.00	6.00	38.96	599.45	12.20	9.87	15.69	2.00	2.00	0.00
700.00	8.00	38.96	698.70	21.68	17.53	27.88	2.00	2.00	0.00
800.00	10.00	38.96	797.47	33.84	27.37	43.52	2.00	2.00	0.00
900.00	12.00	38.96	895.62	48.68	39.37	62.60	2.00	2.00	0.00
	14.00 6 hold at 1000.00		993.06	66.17	53.51	85.10	2.00	2.00	0.00
1,100.00	14.00	38.96	1,090.08	84.98	68.72	109.29	0.00	0.00	0.00
1,200.00	14.00	38.96	1,187.11	103.79	83.94	133.48	0.00	0.00	0.00
1,300.00	14.00	38.96	1,284.14	122.60	99.15	157.67	0.00	0.00	0.00
1,400.00	14.00	38.96	1,381.17	141.41	114.36	181.87	0.00	0.00	0.00
1,500.00 1,600.00 1,670.87 <b>GREEN RIVE</b>	14.00 14.00 14.00	38.96 38.96 38.96	1,478.20 1,575.23 1,644.00	160.22 179.03 192.36	129.58 144.79 155.57	206.06 230.25 247.40	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
1,700.00	14.00	38.96	1,672.26	197.84	160.00	254.44	0.00	0.00	0.00
1,800.00	14.00	38.96	1,769.29	216.65	175.21	278.63	0.00	0.00	0.00
1,900.00	14.00	38.96	1,866.32	235.46	190.43	302.83	0.00	0.00	0.00
2,000.00	14.00	38.96	1,963.35	254.27	205.64	327.02	0.00	0.00	0.00
2,024.37	14.00	38.96	1,987.00	258.85	209.35	332.91	0.00	0.00	0.00
2,100.00	14.00	38.96	2,060.38	273.08	220.85	351.21	0.00	0.00	0.00
2,200.00	14.00	38.96	2,157.41	291.89	236.07	375.40	0.00	0.00	0.00
2,300.00	14.00	38.96	2,254.44	310.70	251.28	399.59	0.00	0.00	0.00
2,400.00	14.00	38.96	2,351.47	329.51	266.49	423.79	0.00	0.00	0.00
2,500.00	14.00	38.96	2,448.50	348.32	281.71	447.98	0.00	0.00	0.00
2,536.59	14.00	38.96	2,484.00	355.20	287.27	456.83	0.00	0.00	0.00
<b>MAHOGANY</b> 2,600.00	14.00	38.96	2,545.53	367.13	296.92	472.17	0.00	0.00	0.00
2,700.00	14.00	38.96	2,642.56	385.94	312.13	496.36	0.00	0.00	0.00
2,800.00	14.00	38.96	2,739.59	404.75	327.34	520.56	0.00	0.00	0.00
2,900.00	14.00	38.96	2,836.62	423.56	342.56	544.75	0.00	0.00	0.00
3,000.00	14.00	38.96	2,933.65	442.37	357.77	568.94	0.00	0.00	0.00
3,000.36	14.00	38.96	2,934.00	442.44	357.83	569.03	0.00	0.00	0.00
3,100.00	14.00	38.96	3,030.68	461.18	372.98	593.13	0.00	0.00	0.00
3,200.00	14.00	38.96	3,127.71	479.99	388.20	617.32	0.00	0.00	0.00
3,226.06	14.00	38.96	3,152.99	484.90	392.16	623.63	0.00	0.00	0.00
Start Drop -1 3,300.00 3,400.00	1. <b>75</b> 12.71 10.96	38.96 38.96	3,224.93 3,322.80	498.17 514.11	402.90 415.79	640.71 661.21	1.75 1.75	-1.75 -1.75	0.00 0.00
3,500.00	9.21	38.96	3,421.26	527.72	426.80	678.71	1.75	-1.75	0.00
3,600.00	7.46	38.96	3,520.20	538.99	435.91	693.20	1.75	-1.75	0.00
3,700.00	5.71	38.96	3,619.53	547.90	443.12	704.66	1.75	-1.75	0.00
3,800.00	3.96	38.96	3,719.17	554.45	448.41	713.08	1.75	-1.75	0.00
3,900.00	2.21	38.96	3,819.03	558.63	451.79	718.46	1.75	-1.75	0.00
4,000.00	0.46	38.96	3,919.00	560.43	453.25	720.78	1.75	-1.75	0.00



# **SDI**Planning Report



Database: EDM5000-RobertS-Local Company: US ROCKIES REGION P

US ROCKIES REGION PLANNING
UTAH - UTM (feet), NAD27, Zone 12N

 Site:
 NBU 921-21C PAD

 Well:
 NBU 921-21C1CS

Wellbore: OH

Project:

Design: PLAN #1 PRELIMINARY

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

**Survey Calculation Method:** 

Well NBU 921-21C1CS

GL 4863 & KB 4 @ 4867.00ft (ASSUMED) GL 4863 & KB 4 @ 4867.00ft (ASSUMED)

True

ned Survey									
neu Survey									
Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth (ft)	Inclination (°)	Azimuth (°)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Section (ft)	Rate (°/100ft)	Rate (°/100ft)	Rate (°/100ft)
4,026.06	0.00	0.00	3,945.06	560.51	453.32	720.88	1.75	-1.75	0.00
	hold at 4026.06		3,943.00	300.31	400.02	720.00	1.75	-1.75	0.00
4,100.00	0.00	0.00	4,018.99	560.51	453.32	720.88	0.00	0.00	0.00
4,200.00	0.00	0.00	4,118.99	560.51	453.32	720.88	0.00	0.00	0.00
4,300.00	0.00	0.00	4,218.99	560.51	453.32	720.88	0.00	0.00	0.00
4,400.00	0.00	0.00	4,318.99	560.51	453.32	720.88	0.00	0.00	0.00
4,500.00	0.00	0.00	4,418.99	560.51	453.32	720.88	0.00	0.00	0.00
4,600.00	0.00	0.00	4,518.99	560.51	453.32	720.88	0.00	0.00	0.00
4,700.00	0.00	0.00	4,618.99	560.51	453.32	720.88	0.00	0.00	0.00
4,800.00	0.00	0.00	4,718.99	560.51	453.32	720.88	0.00	0.00	0.00
				560.51	453.32				
4,900.00 5,000.00	0.00 0.00	0.00 0.00	4,818.99 4,918.99	560.51	453.32 453.32	720.88 720.88	0.00 0.00	0.00 0.00	0.00 0.00
	0.00	0.00	4,918.99 5,018.99	560.51	453.32 453.32	720.88 720.88	0.00	0.00	0.00
5,100.00 5,131.01	0.00	0.00	5,050.00	560.51	453.32 453.32	720.88	0.00	0.00	0.00
WASATCH	0.00	0.00	3,030.00	300.51	400.02	120.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,118.99	560.51	453.32	720.88	0.00	0.00	0.00
5,300.00	0.00	0.00	5,218.99	560.51	453.32	720.88	0.00	0.00	0.00
5,400.00	0.00	0.00	5,216.99	560.51	453.32 453.32	720.88	0.00	0.00	0.00
5,500.00	0.00	0.00	5,418.99	560.51	453.32	720.88	0.00	0.00	0.00
5,600.00	0.00	0.00	5,518.99	560.51	453.32	720.88	0.00	0.00	0.00
5,700.00	0.00	0.00	5,618.99	560.51	453.32	720.88	0.00	0.00	0.00
5,800.00	0.00	0.00	5,718.99	560.51	453.32	720.88	0.00	0.00	0.00
5,900.00	0.00	0.00	5,818.99	560.51	453.32	720.88	0.00	0.00	0.00
6,000.00	0.00	0.00	5,918.99	560.51	453.32	720.88	0.00	0.00	0.00
6,100.00	0.00	0.00	6,018.99	560.51	453.32	720.88	0.00	0.00	0.00
6,200.00	0.00	0.00	6,118.99	560.51	453.32	720.88	0.00	0.00	0.00
6,300.00	0.00	0.00	6,218.99	560.51	453.32	720.88	0.00	0.00	0.00
6,400.00	0.00	0.00	6,318.99	560.51	453.32	720.88	0.00	0.00	0.00
6,500.00	0.00	0.00	6,418.99	560.51	453.32	720.88	0.00	0.00	0.00
6,600.00	0.00	0.00	6,518.99	560.51	453.32	720.88	0.00	0.00	0.00
6,700.00	0.00	0.00	6,618.99	560.51	453.32	720.88	0.00	0.00	0.00
6,800.00	0.00	0.00	6,718.99	560.51	453.32	720.88	0.00	0.00	0.00
6,900.00	0.00	0.00	6,818.99	560.51	453.32	720.88	0.00	0.00	0.00
7,000.00	0.00	0.00	6,918.99	560.51	453.32	720.88	0.00	0.00	0.00
7,100.00	0.00	0.00	7,018.99	560.51	453.32	720.88	0.00	0.00	0.00
7,200.00	0.00	0.00	7,118.99	560.51	453.32	720.88	0.00	0.00	0.00
7,300.00	0.00	0.00	7,218.99	560.51	453.32	720.88	0.00	0.00	0.00
7,400.00	0.00	0.00	7,318.99	560.51	453.32	720.88	0.00	0.00	0.00
7,500.00	0.00	0.00	7,418.99	560.51	453.32	720.88	0.00	0.00	0.00
7,600.00	0.00	0.00	7,518.99	560.51	453.32	720.88	0.00	0.00	0.00
7,700.00	0.00	0.00	7,618.99	560.51	453.32	720.88	0.00	0.00	0.00
7,800.00	0.00	0.00	7,718.99	560.51	453.32	720.88	0.00	0.00	0.00
7,900.00	0.00	0.00	7,818.99	560.51	453.32	720.88	0.00	0.00	0.00
8,000.00	0.00	0.00	7,918.99	560.51	453.32	720.88	0.00	0.00	0.00
8,067.01	0.00	0.00	7,986.00	560.51	453.32	720.88	0.00	0.00	0.00
MESAVERDE									
8,100.00	0.00	0.00	8,018.99	560.51	453.32	720.88	0.00	0.00	0.00
8,200.00	0.00	0.00	8,118.99	560.51	453.32	720.88	0.00	0.00	0.00
8,300.00	0.00	0.00	8,218.99	560.51	453.32	720.88	0.00	0.00	0.00
8,400.00	0.00	0.00	8,318.99	560.51	453.32	720.88	0.00	0.00	0.00
8,500.00	0.00	0.00	8,418.99	560.51	453.32	720.88	0.00	0.00	0.00
	0.00	0.00	8,518.99	560.51	453.32	720.88	0.00	0.00	0.00
8,600.00									



# **SDI**Planning Report



Database: EDM5000 Company: US ROCK

EDM5000-RobertS-Local

US ROCKIES REGION PLANNING UTAH - UTM (feet), NAD27, Zone 12N

NBU 921-21C PAD

 Site:
 NBU 921-21C PAE

 Well:
 NBU 921-21C1CS

Wellbore: OH

Project:

Design: PLAN #1 PRELIMINARY

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well NBU 921-21C1CS

GL 4863 & KB 4 @ 4867.00ft (ASSUMED) GL 4863 & KB 4 @ 4867.00ft (ASSUMED)

True

igii.									
nned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,800.00	0.00	0.00	8,718.99	560.51	453.32	720.88	0.00	0.00	0.00
8,900.00	0.00	0.00	8,818.99	560.51	453.32	720.88	0.00	0.00	0.00
9,000.00	0.00	0.00	8,918.99	560.51	453.32	720.88	0.00	0.00	0.00
9,100.00	0.00	0.00	9,018.99	560.51	453.32	720.88	0.00	0.00	0.00
9,200.00	0.00	0.00	9,118.99	560.51	453.32	720.88	0.00	0.00	0.00
9,300.00	0.00	0.00	9,218.99	560.51	453.32	720.88	0.00	0.00	0.00
9,400.00	0.00	0.00	9,318.99	560.51	453.32	720.88	0.00	0.00	0.00
9,500.00	0.00	0.00	9,418.99	560.51	453.32	720.88	0.00	0.00	0.00
9,600.00	0.00	0.00	9,518.99	560.51	453.32	720.88	0.00	0.00	0.00
9,700.00	0.00	0.00	9,618.99	560.51	453.32	720.88	0.00	0.00	0.00
9,800.00	0.00	0.00	9,718.99	560.51	453.32	720.88	0.00	0.00	0.00
9,900.00	0.00	0.00	9,818.99	560.51	453.32	720.88	0.00	0.00	0.00
10,000.00	0.00	0.00	9,918.99	560.51	453.32	720.88	0.00	0.00	0.00
10,100.00	0.00	0.00	10,018.99	560.51	453.32	720.88	0.00	0.00	0.00
10,200.00	0.00	0.00	10,118.99	560.51	453.32	720.88	0.00	0.00	0.00
10,300.00	0.00	0.00	10,218.99	560.51	453.32	720.88	0.00	0.00	0.00
10,320.01	0.00	0.00	10,239.00	560.51	453.32	720.88	0.00	0.00	0.00
SEGO - SEGO	D_NBU 921-21C	1CS							
10,400.00	0.00	0.00	10,318.99	560.51	453.32	720.88	0.00	0.00	0.00
10,430.01	0.00	0.00	10,349.00	560.51	453.32	720.88	0.00	0.00	0.00
CASTLEGAT	E								
10,500.00	0.00	0.00	10,418.99	560.51	453.32	720.88	0.00	0.00	0.00
10,600.00	0.00	0.00	10,518.99	560.51	453.32	720.88	0.00	0.00	0.00
10,700.00	0.00	0.00	10,618.99	560.51	453.32	720.88	0.00	0.00	0.00
10,800.00	0.00	0.00	10,718.99	560.51	453.32	720.88	0.00	0.00	0.00
10,817.01	0.00	0.00	10,736.00	560.51	453.32	720.88	0.00	0.00	0.00
BLACKHAW	(								
10,900.00	0.00	0.00	10,818.99	560.51	453.32	720.88	0.00	0.00	0.00
11,000.00	0.00	0.00	10,918.99	560.51	453.32	720.88	0.00	0.00	0.00
11,100.00	0.00	0.00	11,018.99	560.51	453.32	720.88	0.00	0.00	0.00
11,200.00	0.00	0.00	11,118.99	560.51	453.32	720.88	0.00	0.00	0.00
11,300.00	0.00	0.00	11,218.99	560.51	453.32	720.88	0.00	0.00	0.00
11,400.00	0.00	0.00	11,318.99	560.51	453.32	720.88	0.00	0.00	0.00
11,417.01	0.00	0.00	11,336.00	560.51	453.32	720.88	0.00	0.00	0.00
PBHL NBU 9	21-21C1CS								

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SEGO_NBU 921-21C1C - plan hits target cent - Circle (radius 25.00)		0.00	10,239.00	560.51	453.32	14,539,412.15	2,044,161.04	40.027735	-109.557799
PBHL_NBU 921-21C1C - plan hits target cent - Circle (radius 100.00		0.00	11,336.00	560.51	453.32	14,539,412.15	2,044,161.04	40.027735	-109.557799



# **SDI**Planning Report



Database: EDM5000-RobertS-Local

Company: US ROCKIES REGION PLANNING
Project: UTAH - UTM (feet), NAD27, Zone 12N

 Site:
 NBU 921-21C PAD

 Well:
 NBU 921-21C1CS

Wellbore: OH

Design: PLAN #1 PRELIMINARY

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well NBU 921-21C1CS

GL 4863 & KB 4 @ 4867.00ft (ASSUMED) GL 4863 & KB 4 @ 4867.00ft (ASSUMED)

True

Casing Points					
	Measured	Vertical		Casing	Hole
	Depth	Depth		Diameter	Diameter
	(ft)	(ft)	Name	(in)	(in)
	3,000.36	2,934.00 8 5/8"		8.625	11.000

Formations							
	Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
	1,670.87	1,606.00	GREEN RIVER				
	2,024.37	1,949.00	BIRDSNEST				
	2,536.59	2,446.00	MAHOGANY				
	5,131.01	5,012.00	WASATCH				
	8,067.01	7,948.00	MESAVERDE				
	10,320.01	10,201.00	SEGO				
	10,430.01	10,311.00	CASTLEGATE				
	10,817.01	10,698.00	BLACKHAWK				

Plan Annotations				
Measured	Vertical	Local Coor	dinates	
Depth (ft)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
300.00		0.00	0.00	Start Build 2.00
1,000.00		66.17	53.51	Start 2226.06 hold at 1000.00 MD
3,226.06	-,	484.90	392.16	Start Drop -1.75
4,026.06	-,	560.51	453.32	Start 7390.94 hold at 4026.06 MD
11,417.01	11,336.00	560.51	453.32	TD at 11417.01



### **US ROCKIES REGION PLANNING**

UTAH - UTM (feet), NAD27, Zone 12N NBU 921-21C PAD NBU 921-21C4BS

OH

Plan: PLAN #1 PRELIMINARY

## **Standard Planning Report**

25 April, 2012



#### Kerr-McGee Oil & Gas Onshore. L.P.

#### NBU 921-21C Pad

<u> API #</u>	_	NBU 921-21C1BS	_	
	Surface:	972 FNL / 1688 FWL	NENW	Lot
	BHL:	84 FNL / 2152 FWL	NENW	Lot
<u>API #</u>		NBU 921-21C1CS		
	Surface:	975 FNL / 1698 FWL	NENW	Lot
	BHL:	414 FNL / 2152 FWL	NENW	Lot
<u>API #</u>		NBU 921-21C4BS	_	
	Surface:	978 FNL / 1707 FWL	NENW	Lot
	BHL:	745 FNL / 2153 FWL	NENW	Lot
<u>API #</u>		NBU 921-21D4CS	_	
	Surface:	969 FNL / 1679 FWL	NENW	Lot
	BHL:	1240 FNL / 826 FWL	NWNW	Lot

This Surface Use Plan of Operations (SUPO) or 13-point plan provides site-specific information for the above-referenced wells.

In accordance with Utah Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling, these wells will be directionally drilled. Refer to Topo Map A for directions to the location and Topo Maps A and B for location of access roads within a 2-mile radius.

An on-site meeting was held on May 8, 2012. Present were:

- · David Gordon, Melissa Wardle, Tyler Cox BLM;
- · Bucky Secakuku BIA;
- · Brad Pinecoose Ute Indian Tribe;
- · Amy Ackman Montgomery Archeological Consultants Inc.;
- Scott Carson Smiling Lake Consulting;
- John Slaugh, Mitch Batty Timberline Engineering & Land Surveying, Inc.;
- · Danielle Piernot, Raleen White, Doyle Holmes, Rod Anderson, Charles Chase Kerr-McGee
- · Tim Horgan-Kobelski Grasslands Consulting, Inc.
- · Justin Strauss SWCA Environmental Consultants

#### A. Existing Roads:

Existing roads consist of county and improved/unimproved access roads (two-tracks). In accordance with Onshore Order #1, Kerr-McGee will, in accordance with BMPs, improve or maintain existing roads in a condition

Surface Use Plan of Operations 2 of 14

that is the same as or better than before operations began. New or reconstructed proposed access roads are discussed in Section B.

The existing roads will be maintained in a safe and usable condition. Maintenance for existing roads will continue until final abandonment and reclamation of well pads and/or other facilities, as applicable. Road maintenance will include, but is not limited to, blading, ditching, and/or culvert installation and cleanout. To ensure safe operating conditions, gravel surfacing will be performed where excessive rutting or erosion may occur. Dust control will be performed as necessary to ensure safe operating conditions.

Roads, gathering lines and electrical distribution lines will occupy common disturbance corridors where possible. Where available, roadways will be used as the staging area and working space for installation of gathering lines. All disturbances located in the same corridor will overlap each other to the maximum extent possible, while maintaining safe and sound construction and installation practices. Unless otherwise approved or requested in site specific documents, in no case will the maximum disturbance widths of the access road and utility corridors exceed the widths specified in Part D of this document.

Please refer to Topo B, for existing roads.

#### B. New or Reconstructed Access Roads:

All new or reconstructed roads will be located, designed, and maintained to meet the standards of the BIA.

Each new well pad or pad expansion may require construction of a new access road and/or de-commissioning of an older road. Plans, routes, and distances for new roads and road improvements are provided in design packages, exhibits and maps for a project. Project-specific maps are submitted to depict the locations of existing, proposed, and/or decommissioned and include the locations for supporting structures, including, but not limited to, culverts, bridges, low water crossings, range infrastructure, and haul routes, as per OSO 1. Designs for cuts and fills, including spoils source and storage areas, are provided with the road designs, as necessary.

Where safety objectives can be met. As applicable, Kerr-McGee may use unimproved and/or two-track roads for lease operations, to lessen total disturbance.

Road designs will be based on the road safety requirements, traffic characteristics, environmental conditions, and the vehicles the road is intended to carry. Generally, newly constructed unpaved lease roads will be crowned and ditched with the running surfaces of the roads approximately 12-18 feet wide and a total road corridor width not to exceed 45 feet, except where noted in the road design for a specific project. Maximum grade will generally not exceed 8%. Borrow ditches will be back sloped 3:1 or less. Construction BMPs will be employed to control onsite and offsite erosion.

Where topography would direct storm water runoff to an access road or well pad, drainage ditches or other common drainage control facilities, such as V- or wing-ditches, will be constructed to divert surface water runoff. Drainage features, including culverts, will be constructed or installed prior to commencing other operations, including drilling or facilities placement. Riprap will be placed at the inlet and outlet at the culvert(s), as necessary.

Prior to construction, new access road(s) will be staked according to the requirements of OSO 1. Construction activity will not be conducted using frozen or saturated materials or during periods when significant watershed damage

Surface Use Plan of Operations 3 of 14

(e.g. rutting, extensive sheet soil erosion, formation of rills/gullies, etc.) is likely to occur. Vegetative debris will not be placed in or under fill embankments.

New road maintenance will include, but is not limited to, blading, ditching, culvert installation and cleanout, gravel surfacing where excessive rutting or erosion may occur and dust control, as necessary to ensure safe operating conditions. All vehicular traffic, personnel movement, construction/restoration operations will be confined to the approved area and to existing roadways and/or access routes.

Snow removal will be conducted on an as-needed basis to accommodate safe travel. Snow removal will occur as necessary throughout the year, as will necessary drainage ditch construction. Removed snow may be stored on permitted well pads to reduce hauling distances and/or at the aerial extent of approved disturbance boundaries to facilitate snow removal for the remainder of the season.

If a county road crossing or encroachment permit is needed, it will be obtained prior to construction.

The following segments will require a ROW to be submitted under a different cover to the Ute Indian Tribe.

 $\pm 20$ ' (0.01 miles) – Section 21 (NE/4 NW/4) T9S R21E – On lease UTU0576 Ute Indian Tribe surface, new access road from the edge of the pad to the existing road to the west. Please refer to Topo B.

#### C. Location of Existing Wells:

A) Refer to Topo Map C.

#### D. Location of Existing and/or Proposed Facilities:

This is a new pad; therefore does not have any existing facilities. Gathering (pipeline) infrastructure will be utilized to collect and transport gas and fluids from the wells which are owned and operated by Kerr McGee Oil and Gas Onshore (Kerr-McGee).

Should the well(s) prove productive, production facilities will be installed on the disturbed portion of each well pad. A berm will be constructed completely around production components (typically excluding dehy's and/or separators) that contain fluids (i.e. production tanks, produced liquids tanks). The berms will generally be constructed of compacted subsoil or corrugated metal, and will hold the capacity of the largest tank and have sufficient freeboard to accommodate a 25 year rainfall event. This includes pumping units. Aboveground structures constructed or installed onsite for 6 months or longer, will be painted a flat, non-reflective, earth-tone color chosen at the onsite (typically Shadow Gray). A production facility layout is provided as part of a project-specific APD, ROW or NOS submission.

#### **GAS GATHERING**

Please refer to Topo D2- Pad and Pipeline Detail.

The gas gathering pipeline material: Steel line pipe. Surface = Bare pipe. Buried = Coated with fusion bonded epoxy coating (or equivalent). The total gas gathering pipeline distance from the meter to the tie in point is  $\pm 695$ ° and the individual segments are broken up as follows:

Kerr-McGee Oil Gas Onshore, L.P.

The following segments will require a ROW to be submitted under a different cover to the Ute Indian Tribe.

±695' (0.1 miles) – Section 21 T9S R21E– On-lease UTU0576 Ute Indian Tribe Surface, New 6" and 16" buried gas gathering pipeline from the meter to the NBU 921-21D Pad intersection. Please refer to Topo D2 - Pad and Pipeline Detail.

#### **LIQUID GATHERING**

Please refer to Topo D2- Pad and Pipeline Detail.

The total liquid gathering pipeline distance from the separator to the tie in point is  $\pm 695$ ' and the individual segments are broken up as follows:

The following segments will require a ROW to be submitted under a different cover to the Ute Indian Tribe.

±695' (0.01 miles) – Section 21 T9S R21E– On-lease UTU0576 Ute Indian Tribe Surface, New 6" buried liquid gathering pipeline from the separator to the NBU 921-21D Pad intersection. Please refer to Topo D2 - Pad and Pipeline Detail.

#### **Pipeline Gathering Construction**

Gathering (pipeline) infrastructure will be utilized to collect and transport gas and fluids from the wells which are owned and operated by Kerr McGee. Gas gathering pipeline(s,) gas lift, or liquids pipelines may be constructed to lie on the surface or be buried. Where the pipeline is adjacent to the road or well pad, the road and/or well pad will be utilized for construction activities and staging. The area of disturbance during construction from the edge of road or well pad will typically be 30' in width. Where pipelines run cross country, the width of disturbance will typically be 45 ft for buried lines and 30 ft for surface lines. In addition, Kerr-McGee requests for a permanent 30' disturbance width that will be maintained for the portion adjacent to the road. The need for the 30' permanent disturbance width is for maintenance and repairs. Cross country permanent disturbance width also are required to be 30ft.

Above-ground installation will generally not require clearing of vegetation or blading of the surface, except where safety considerations necessitate earthwork. In some surface pipeline installation instances pipe cannot be constructed where it will lay. In these cases where an above-ground pipeline is constructed parallel and adjacent to a road, it will be welded/fused on the road and then lifted from the road to the pipeline route. In other cases where a pipeline route is not parallel and adjacent to a road (cross-country between sites), it will be welded/fused in place at a well pad, access road, or designated work area and pulled between connection locations with a suitable piece of equipment.

Buried pipelines will generally be installed parallel and adjacent to existing and/or newly constructed roads and within the permitted disturbance corridor. Buried pipelines may vary from 2 inches (typically fuel gas lines) to 24 inches (typically transportation lines) in diameter, but 6 to 16 inches is typical for a buried gas line. The diameter of liquids pipelines may vary from 2 inches to 12 inches, but 6 inches is the typical diameter. Gas lift lines may vary from 2 to 12 inches in diameter, but 6-inch diameter pipes are generally used for gas lift. If two or more pipelines are present (gas gathering, gas lift, and fluids), they will share a common trench where possible.

Surface Use Plan of Operations 5 of 14

Typically, to install a buried pipeline, topsoil will be removed, windrowed and placed on the non-working side of the route for later reclamation. Because working room is limited, the spoil may be spread out across the working side and construction will take place on the spoil. The working side of the corridor will be used for pipe stringing, bending, welding and equipment travel. Small areas on the working side displaying ruts or uneven ground will be groomed to facilitate the safe passage of equipment. After the pipelines are installed, spoil will be placed back into the trench, and the topsoil will be redistributed over the disturbed corridor prior to final reclamation. Typical depth of the trench will be 6 feet, but depths may vary according to site-specific conditions (presence of bedrock, etc.). The proposed trench width for the pipeline would range from 18-48 inches.

The pipeline will be welded along the proposed route and lowered into place. Trenching equipment will cut through the soil or into the bedrock and create good backfill, eliminating the need to remove large rocks. The proposed buried pipeline will be visually and radiographically inspected and the entire pipeline will be pneumatically or hydrostatically tested before being placed into service. Routine vehicle traffic will be prevented from using pipeline routes as travel ways by posting signs at the route's intersection with an access road.

The liquid gathering lines will be made of polyethylene or a composite polyethylene/steel or polyethylene/fiberglass that is not subject to internal or external pipe corrosion. The content of the produced fluids to be transferred by the liquid gathering system will be approximately 92% produced water and 8% condensate. Trunk line valve connections for the water gathering system will be below ground but accessible from the surface in order to prevent freezing during winter time.

If pipelines or roads encounter a drainage that could be subject to flooding or surface water during extreme precipitation events, Kerr-McGee will apply all applicable Army Corps mandates as well as the BLM's Hydraulic Considerations for Pipeline Crossings of Stream Channels (BLM Technical Note 423, April 2007). In addition, all stream and drainage crossings will be evaluated to determine the need for stream alteration permits from the State of Utah Division of Water Rights and if necessary, required permits will be secured. Similarly, where a road or pipeline crossing exists the pipe will be butt welded and buried to a depth between 24 and 48 inches or more. Dirt roads will be cut and restored to a condition equivalent to the existing condition. All Uintah County road encroachment and crossing permits, where applicable, will be obtained prior to crossing construction. In no case will pressure testing of pipelines result in discharge of liquids to the surface.

Pipeline signs will be installed along the route to indicate the pipeline proximity, ownership, and to provide emergency contact phone numbers. Above ground valves and lateral T's will be installed at various locations for production integrity and safety purposes.

Upon completion of the proposed buried pipeline, the entire area of disturbance will be reclaimed to the standards proposed in the Green River District Reclamation Guidelines. Please refer to section J for more details regarding final reclamation.

When no longer deemed necessary by the operator, Kerr-McGee or it's successor will consult with the Vernal BIA Office before terminating of the use of the pipeline(s).

#### The Anadarko Completions Transportation System (ACTS) information:

Kerr-McGee will use either a closed loop drilling system that will require one pit and one storage area to be constructed on the drilling pad or a traditional drilling operation with one pit. The storage area will be used to contain only the de-watered drill cuttings and will be lined and reclaimed according to traditional pit closure standards. The pit will be constructed to

allow for completion operations. The completion operations pit is lined and will be used for the wells drilled on the pad or used as part of our Anadarko Completions Transportation (ACTS) system which is discussed in more detail below. Using the closed loop drilling system will allow Kerr-McGee to decrease the amount of disturbance/footprint on location compared to a single large drilling/completion pit.

If Kerr-McGee does not use a closed loop system, it will construct a drilling reserve pit to contain drill cuttings and for use in completion operations. Depending on the location of the pit, its relation to future drilling locations, the reserve/completion pit will be utilized for the completion of the wells on that pad and/or be used as part of our ACTS system.

Kerr-McGee will use ACTS to optimize the completion processes for multiple pads across the project area which may include up to a section of development. ACTS will facilitate management of frac fluids by utilizing existing reserve pits and temporary, surface-laid aluminum liquids transfer lines between frac locations. The pit will be refurbished as follows when a traditional drill pit is used: mix and pile up drill cuttings with dry dirt, bury the original liner in the pit, walk bottom of pit with cat. Kerr-McGee will reline the pit with a 30 mil liner and double felt padding. The refurbished pit will be the same size or smaller as specified in the originally approved ROW/APD. The pit refurb will be done in a normal procedure and there will be no modification to the pit.

All four sides of the completions pit will be fenced in according to standard pit fencing procedures. Netting will be installed over all pits.

The collected hydrocarbons will be treated and sold at approved sales facilities. A loading rack with drip containment will also be installed where water trucks would unload and load to prevent damage caused from pulling hoses in and out of the pit.

ACTS will require temporarily laying multiple 6" aluminum water transfer lines on the surface between either existing or refurbished reserve pits. The temporary aluminum transfer lines will be utilized to transport frac fluid being injected and/or recovered during the completion process and will be laid adjacent to existing access roads or pipeline corridors.

Upon completion of the frac operation, the liquids transfer lines will be flushed with fresh water and purged with compressed air. The contents of the transfer lines will be flushed into a water truck for delivery to another ACTS location or a reserve pit.

The temporary ACTS lines will be permitted under a separate cover to the Ute Indian Tribe.

The volume of frac fluid transported through a water transfer line will vary, but volume is projected to be approximately 1.75 bbls per 50-foot joint. Although the maximum working pressure is 125 psig, the liquids transfer lines will be operated at a pressure of approximately 30 to 40 psig. Kerr-McGee requests to keep the netted pit open for one year from first production of the first produced well on the pad. During this time the surrounding well location completion fluids may be recycled in this pit and utilized for other frac jobs in the area. After one year Kerr-McGee will backfill the pit and reclaim. If the pit is not needed for an entire year it will be backfilled and reclaimed earlier. Kerr-McGee understands that due to the temporary nature of this system, BIA considers this a casual use situation; therefore, no permanent ROW or temporary use plan will need to be issued by the BIA.

Kerr-McGee Oil Gas Onshore, L.P.

Surface Use Plan of Operations 7 of 14

#### E. Location and Types of Water Supply:

Water for drilling and completion operations will be obtained from the following sources:

Permit # 49-2307	JD Field Services	Green River- Section 15, T2N, R22E
Permit # 49-2321	R.N. Industries	White River- Section 2, T10S, R24E
Permit # 49-2319	R.N. Industries	White River- Various Sources
Permit # 49-2320	R.N. Industries	Green River- Section 33, T8S, R23E

Water will be hauled to location over the roads marked on Maps A and B.

No water well is to be drilled on this lease.

#### F. Construction Materials:

Construction operations will typically be completed with native materials found on location. Construction materials that must be imported to the site (mineral material aggregate, soils or materials suitable for fill/surfacing) will be obtained from a nearby permitted source (described in site-specific documents). No construction materials will be removed from Tribal lands without prior approval from the BIA. A source location other than an on-location construction site will be designated either via a map or narrative within the project specific materials provided to the BIA.

#### G. Methods for Handling Waste:

All wastes subject to regulation will be handled in compliance with applicable laws to minimize the potential for leaks or spills to the environment. Kerr-McGee also maintains a Spill Control and Countermeasure Plan, which includes notification requirements, including the BIA, for all reportable spills of oil, produced liquids, and hazardous materials.

Any accidental release, such as a leak or spill in excess of the reportable quantity, as established by 40 CFR Part 117.3, will be reported as per the requirements of CERCLA, Section 102 B. If a release involves petroleum hydrocarbons or produced liquids, Kerr-McGee will comply with the notification requirements of NTL-3A. Drill cuttings and/or drilling fluids will be contained in the reserve/frac pit whether a closed loop system is used or not. Cuttings will be buried in pit(s) upon closure. Unless specifically approved by the BIA, no oil or other oil-based drilling additives, chromium/metals-based, or saline muds will be used during drilling. Only fresh water (as specified above), biodegradable polymer soap, bentonite clay, and/or non-toxic additives will be used in the mud system.

Pits will be constructed to minimize the accumulation of surface precipitation runoff into the pit (via appropriate placement of subsoil storage areas and/or construction of berms, ditches, etc.). Should unexpected liquid petroleum hydrocarbons (crude oil or condensate) be encountered during drilling, completions or well testing, liquid petroleum hydrocarbons will either be contained in test tanks on the well site or evacuated by vacuum trucks and transported to an approved disposal/sales facility. Should petroleum hydrocarbons unexpectedly be released into a pit, they will be removed as soon as practical but in no case will they remain longer than 72 hours unless an alternate is approved by the BIA. Should timely removal not be feasible, the pit will be netted as soon as practical. Similarly, hydrocarbon removal will take place prior to the closure of the pit, unless authorization is provided for disposal via alternate pit closure methods (e.g. solidification).

The reserve and/or fracture stimulation pit will be lined with an impermeable liner. The liner will be a synthetic material 30 mil or thicker. The bottom and side walls of the pit will be void of any sharp rocks that could puncture the liner. The liner will be installed over smooth fill subgrade that is free of pockets, loose rocks, or other materials (i.e. sand, sifted dirt, bentonite, straw, etc.) that could damage the liner. After evaporation and when dry, the reserve pit liners will be cut off, ripped and/or folded back (as safety considerations allow) as near to the mud surface as possible and buried on location or hauled to a landfill prior to backfilling the pit with a minimum of five feet of soil material.

Where necessary and if conditions (freeboard, etc.) allow, produced liquids from newly completed wells may be temporarily disposed of into pits for a period not to exceed 90 days as per Onshore Order Number 7 (OSO 7). Subsequently, permanent approved produced water disposal methods will be employed in accordance with OSO 7 and/or as described in a Water Management Plan (WMP). Otherwise, fluids disposal locations and associated haul routes, for ROW consideration, are typically depicted on Topo A of individual projects. Revisions to the water source or method of transportation will be subject to written approval from the BIA.

Any additional pits necessary for subsequent operations, such as temporary flare or workover pits, will be contained within the originally approved well pad and disturbance boundaries. Such temporary pits will be backfilled and reclaimed within 180 days of completion of work at a well location.

Pits containing drilling cuttings, mud, and/or completions fluids will be allowed to dry. Any free fluids remaining after one year from reaching total depth, date of completion, and/or determination of inactivity will be removed (as weather conditions allow) to an approved site and the pit reclaimed. Installation and operation of any sprinklers, pumps, and equipment will ensure that water spray or mist does not drift.

No garbage or non-exempt substances as defined by Resource Conservation and Recovery Act (RCRA) subtitle C will be placed in the reserve pit. All refuse (trash and other solid waste including cans, paper, cable, etc.) generated during construction, drilling, completion, and well testing activities will be contained in an enclosed receptacle, removed from the drill locations promptly, and transported to an approved disposal facility. Immediately after removal of the drilling rig, all debris and other waste materials not contained within trash receptacles will be collected and removed from the well location.

For the protection of livestock and wildlife, all open pits (excluding flare pits) will be fenced to prevent wildlife or livestock entry. Total height of pit fencing will be at least 42 inches and corner posts will be cemented and/or braced in such a manner as to keep the fence tight at all times. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet. Siphons, catchments, and absorbent pads will be installed to keep hydrocarbons produced by the drilling rig or other equipment on location from entering the reserve pit. Hydrocarbons, contaminated pads, and/or soils will be disposed of in accordance with state and federal requirements.

Portable, self-contained chemical toilets and/or sewage processing facilities will be provided for human waste disposal. Upon completion of operations, or as required, the toilet holding tanks will be pumped and the contents disposed of in an approved sewage disposal facility. All applicable regulations pertaining to disposal of human and solid waste will be observed.

NBU 921-21C1BS/921-21C1CS/ 921-21C4BS/ 921-21D4CS Surface Use Plan of Operations Kerr-McGee Oil Gas Onshore, L.P.

#### **Materials Management**

Hazardous materials above reportable quantities will not be produced by drilling or completing proposed wells or constructing the pipelines/facilities. The term "hazardous materials" as used here means: (1) any substance, pollutant, or containment listed as hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended 42 U.S.C. 9601 et seq., and the regulations issued under CERCLA; and (2) any hazardous waste as defined in RCRA of 1976, as amended. In addition, no extremely hazardous substance, as defined in 40 CFR 355, in threshold planning quantities, would be used, produced, stored, transported, or disposed of while producing any well.

Hazardous materials may be contained in some grease or lubricants, solvents, acids, paint, and herbicides, among others as defined above. Kerr-McGee maintains a file, per 29 CFR 1910.1200 (g) containing current Material Safety Data Sheets (MSDS) for all chemicals, compounds, and/or substances that are used during the course of construction, drilling, completion, and production operations for this project. The transport, use, storage and handling of hazardous materials will follow procedures specified by federal and state regulations. Transportation of hazardous materials to the well location is regulated by the Department of Transportation (DOT) under 49 CFR, Parts 171-180. DOT regulations pertain to the packing, container handling, labeling, vehicle placarding, and other safety aspects.

Potentially hazardous materials used in the development or operation of wells will be kept in limited quantities on well sites and at the production facilities for short periods of time. Chemicals meeting the criteria for being an acutely hazardous material/substance or meet the quantities criteria per BLM Instruction Memorandum No. 93-344 will not be used.

Chemicals subject to reporting under Title III of the Superfund Amendments and Reauthorization Act (SARA) in quantities of 10,000 pounds or more may be produced and/or stored at production facilities (crude oil/condensate, produced water). They may also be kept in limited quantities on drilling sites (barite, diesel fuel, cement, cottonseed hulls etc.) for short periods of time during drilling or completion activities.

Fluids disposal and pipeline/haul routes are depicted on Topo Map A.

Any produced water separated from recoverable condensate from the proposed well will be contained in a water tank and will then be transported by pipeline and/or truck to one of the pre-approved disposal sites:

> RNI in Sec. 5 T9S R22E NBU #159 in Sec. 35 T9S R21E Ace Oilfield in Sec. 2 T6S R20E MC&MC in Sec. 12 T6S R19E Pipeline Facility in Sec. 36 T9S R20E

Goat Pasture Evaporation Pond in SW/4 Sec. 16 T10S R22E

Bonanza Evaporation Pond in Sec. 2 T10S R23E

Or to one of the following Kerr-McGee active Salt Water Disposal (SWD) wells:

NBU 159 SWD in Sec. 35 T9S R21E CIGE 112D SWD in Sec. 19 T9S R21E CIGE 114 SWD in Sec. 34 T9S R21E NBU 921-34K SWD in Sec. 34 T9S R21E NBU 921-33F SWD in Sec. 34 T9S R21E

9 of 14

#### H. Ancillary Facilities:

Kerr-McGee Oil Gas Onshore, L.P.

No additional ancillary facilities are planned for this location.

#### I. Well Site Layout:

The location, orientation and aerial extent of each drill pad, reserve/completion/flare pit (for closed loop or non-closed loop operations), access road ingress/egress points, drilling rig, dikes/ditches, existing wells/infrastructure, proposed cuts and fills, and topsoil and spoil material stockpile locations are depicted on the exhibits for each project, where applicable. Site-specific conditions may require slight deviation in actual equipment depending on whether a closed loop system is used. Surface distance may be less if using closed loop. But in either case, the area of disturbance will not exceed the maximum disturbance outlined in the attached exhibits.

For the protection of livestock and wildlife, all open pits and cellars will be fenced to prevent wildlife or livestock entry. Total height of pit fencing will be at least 42 inches and corner posts will be cemented and/or braced in such a manner as to keep the fence tight at all times. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.

Each well will utilize either a centralized tank battery, centralized fluids management system, or have tanks installed on its pad. Production/ Produced Liquid tanks will be constructed, maintained, and operated to prevent unauthorized surface or subsurface discharges of liquids and to prevent livestock or wildlife entry. The tanks will be kept reasonably free from surface accumulations of liquid hydrocarbons. The tanks are not to be used for disposal of liquids from additional sources without prior approval of BIA.

#### J. Plans for Surface Reclamation:

The surface reclamation will be undertaken in two phases: interim and final. Interim reclamation is conducted following well completion and extends through the period of production. Interim reclamation is for the area of the well pad that is not required for production activities. Final reclamation is conducted following well plugging/conversion and/or facility abandonment processes.

Reclamation activities in both phases may include but is not limited to the re-contouring or re-configuration of topographic surfaces, restoration of drainage systems, segregation of spoils materials, minimizing surface disturbance, re-evaluating backfill requirements, pit closure, topsoil redistribution, soil treatments, seeding and weed control.

#### **Interim Reclamation**

Interim reclamation may include pit evaporation, fluid removal, pit solidification, re-contouring, ripping, spreading top soil, seeding, and/or weed control. Interim reclamation will be performed in accordance with OSO 1, or written notification will be provided to the BIA for approval. Where feasible, drilling locations, reserve pits, or access routes not utilized for production operations will be re-contoured to a natural appearance.

Interim re-contouring involves bringing all construction material from cuts and fills back onto the well pad and site and reestablishing the natural contours where desirable and practical. Fill and stockpiled spoils no longer necessary to the operation will be spread on the cut slopes and covered with stockpiled topsoil. All stockpiled top soils will be used for interim reclamation where practical to maintain soil viability. Where possible, the land surface will be left "rough" after re-contouring to ensure that the maximum surface area will be available to support the reestablishment of vegetative cover.

Surface Use Plan of Operations 11 of 14

A reserve pit, upon being allowed to dry, will be backfilled and compacted with cover materials that are void of any topsoil, vegetation, large stones, rocks or foreign objects. Soils that are moisture laden, saturated, or partially/completely frozen will not be used for backfill or cover. The pit area will be mounded to allow for settling and to promote positive surface drainage away from the pit. Disposal of pit fluids and linings is discussed in Section G.

#### **Final Reclamation**

Final reclamation will be performed for unproductive wells and after the end of the life of a productive well. As soon as practical after the conclusion of drilling and testing operations, unproductive drill holes will be plugged and abandoned (P&A). Site and road reclamation will commence following plugging. In no case will reclamation at non-producing locations be initiated later than six (6) months from the date a well is plugged. A joint inspection of the disturbed area to be reclaimed may be requested by Kerr-McGee. The primary purpose of this inspection will be to review the existing conditions, or agree upon a revised final reclamation and abandonment plan. The BIA will be notified prior to commencement of reclamation operations. A Notice of Intent to Abandon will be filed for final recommendations regarding surface reclamation.

After plugging, all wellhead equipment that is no longer needed will be removed, and the well site will be reclaimed. Final contouring will blend with and follow as closely as practical the natural terrain and contours of the original site and surrounding areas. After re-contouring the site to the approximate contour that existed prior to pad construction, final grading will be conducted over the entire surface of the well site and access road. The area will be ripped to a depth of 18 to 24 inches on 18 to 24-inch centers, where practical. The surface soil material will be pitted with small depressions to form longitudinal depressions 12 to 18 inches deep, where practical. The entire area will be uniformly covered with the depressions constructed perpendicular to the natural flow of water.

Reclamation of roads will be performed at the discretion of the BIA/Tribe. All unnecessary surface equipment and structures (e.g. cattle guards) and water control structures (e.g. culverts, drainage pipes) not needed to facilitate successful reclamation will be removed during final reclamation. Roads that will be reclaimed will be ripped to a depth of 18 inches where practical, re-contoured to approximate the original contour of the ground and seeded in accordance with the seeding specifications as proposed below in "Measures Common to Interim and Final Reclamation".

Upon successfully completing reclamation of a P&A location, a Final Abandonment Notice will be submitted to the BIA/Tribe.

#### **Measures Common to Interim and Final Reclamation**

Soil preparation will be conducted using a disk for areas in need of more soil preparation following site preparation. This will provide primary soil tillage to a depth no greater than 6 inches. Prior to reseeding, compacted areas will be scarified by ripping or chiseling to loosen compacted soils, promote water infiltration, and improve soil aeration and root penetration.

Seeding will occur year-round as conditions allow and will typically be accomplished through the use of a no-till rangeland style seed drill with a "picker box" in order to seed "fluffy" seed. Where drill seeding is not the preferred method, seed will be broadcast and then raked into the ground at double the rate of drill seeding. Seed mixes appropriate to the native plant community as determined and specified for each project location based on the site specific soils will be used for

Surface Use Plan of Operations 12 of 14

re-vegetation. The seed mixes will be selected from a list provided by or approved by the BIA/Tribe or a specific seed mix will be proposed by Kerr-McGee to the BIA/Tribe and used after its approval. The selected specific seed mix for each well location and road segment will be utilized while performing interim and final reclamation for each project. All seed will be certified and tags will be maintained by Kerr-McGee. Every effort will be made to obtain "cheat grass free seed".

Seed Mix to be used for Well Site, Access Road, and Pipeline (as applicable):

Indian Ricegrass (Nezpar)	3
Sandberg Bluegrass	0.75
Bottlebrush Squirreltail	1
Great Basin Wildrye	0.5
Crested Wheatgrass	1.5
Winterfat	0.25
Shadscale	1.5
Four-wing Saltbrush	0.75
Forage Kochia	0.25
Total	9.5

Additional soil amendments and/or stabilization may be required on sites with poor soils and/or excessive erosion potential. Where severe erosion can become a problem and/or the use of machinery is not practical, seed will be hand broadcast and raked with twice the specified amount of seed. Slopes will be stabilized using materials specifically designed to prevent erosion on steep slopes and hold seed in place so vegetation can become permanently established. These materials will include, but are not limited to: erosion control blankets, hydro-mulch, and/or bonded fiber matrix at a rate to achieve a minimum of 80 percent soil coverage.

#### **Weed Control**

Noxious weeds will be controlled in akk orihect areas un accordance with all applicable rules and regulations.

#### K. Surface/Mineral Ownership:

Ute Indian Tribe
P.O. Box 70
Bureau of Land Management
988 South 7500 East Annex Building
Fort Duschesne, UT 84026
Vernal, UT 84078
(435) 722-4307
(435) 781-4400

#### L. Other Information:

#### **Onsite Specifics:**

No Changes

#### **Cultural and Paleontological Resources**

All personnel are strictly prohibited from collecting artifacts, any paleontological specimens or fossils, and from disturbing any significant cultural resources in the area. If artifacts, fossils, or any culturally sensitive materials are exposed or identified in the area of construction, all construction operations that would affect the newly discovered resource will cease, and Kerr-McGee will provide immediate notification to the BIA.

#### **Resource Reports:**

A Class I literature survey was completed on April 25, 2012 by Montgomery Archaeological Consultants, Inc (MOAC). For additional details please refer to report MOAC 12-102.

A paleontological reconnaissance survey was completed on April 10-16, 2012 by SWCA Environmental Consultants. For additional details please refer to report UT12-14314-107, UT12-14314-123 and UT12-14314-124.

Biological field survey was completed on April 10-13, 2012 by Grasslands Consulting, Inc (GCI). For additional details please refer to report GCI-742 and GCI-754.

#### **Proposed Action Annual Emissions Tables:**

Table 1: Proposed Action Annual Emissions (tons/year) <sup>1</sup>				
Pollutant	Development	Production	Total	
NOx	3.8	0.12	3.92	
CO	2.2	0.11	2.31	
VOC	0.1	4.9	5	
$SO_2$	0.005	0.0043	0.0093	
$PM_{10}$	1.7	0.11	1.81	
PM <sub>2.5</sub>	0.4	0.025	0.425	
Benzene	2.2E-03	0.044	0.046	
Toluene	1.6E-03	0.103	0.105	
Ethylbenzene	3.4E-04	0.005	0.005	
Xylene	1.1E-03	0.076	0.077	
n-Hexane	1.7E-04	0.145	0.145	
Formaldehyde	1.3E-02	8.64E-05	1.31E-02	

<sup>&</sup>lt;sup>1</sup> Emissions include 1 producing well and associated operations traffic during the year in

which the project is developed

Table 2: Proposed Action versus 2012 WRAP Phase III Emissions Inventory Comparison						
WRAP Phase III 2012 Uintah Basin Proposed Action Production Emissions Species  WRAP Phase III 2012 Uintah Basin Percentage o Proposed Action Inventory <sup>a</sup> (ton/yr) III						
NOx	15.68	16,547	0.09%			
VOC	20	127,495	0.02%			

 $<sup>^</sup>a\ http://www.wrapair.org/forums/ogwg/PhaseIII\_Inventory.html$ 

Uintah Basin Data

Surface Use Plan of Operations 14 of 14

NBU 921-21C1BS/921-21C1CS/ 921-21C4BS/ 921-21D4CS Kerr-McGee Oil Gas Onshore, L.P.

#### M. Lessee's or Operators' Representative & Certification:

Danielle Piernot Regulatory Analyst II Kerr-McGee Oil & Gas Onshore LP PO Box 173779 Denver, CO 80217-3779 (720) 929-6156 Tommy Thompson General Manager, Drilling Kerr-McGee Oil & Gas Onshore LP PO Box 173779 Denver, CO 80217-3779 (720) 929-6724

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Bureau of Land Management Nationwide Bond WYB000291.

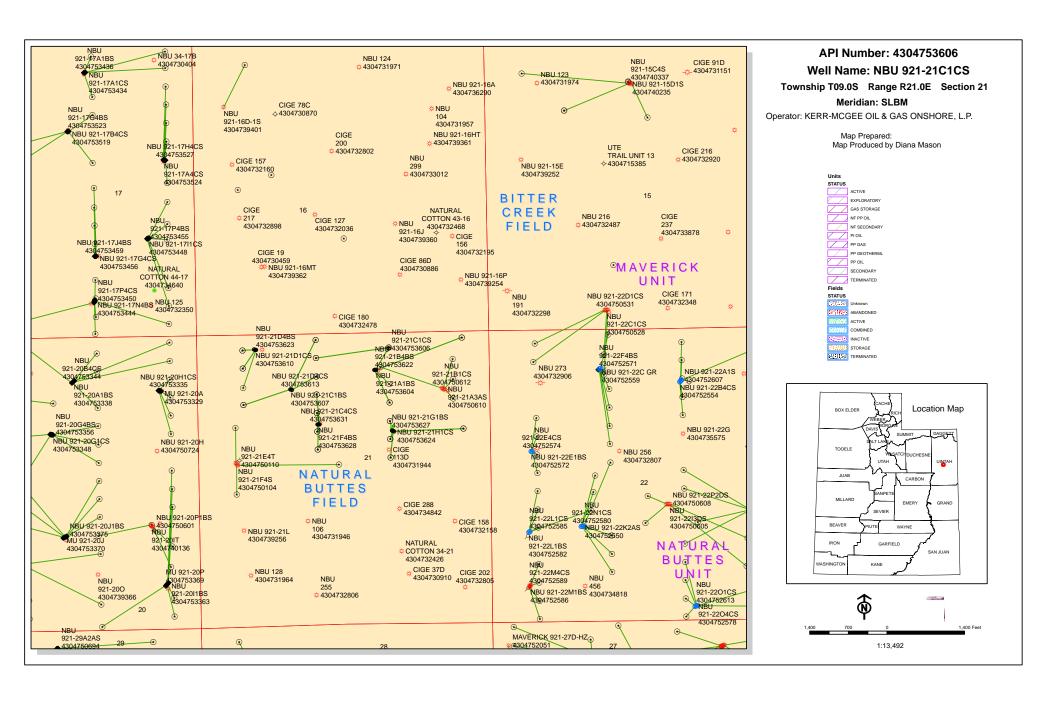
I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that I have full knowledge of the State and Federal laws applicable to this operation; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Danielle Piernot

Date

June 22, 2012

Date



API Well Number: 43047536060000

# **United States Department of the Interior**

### BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

February 26, 2013

Memorandum

To: Assistant Field Office Manager Minerals,

Vernal Field Office

From: Michael Coulthard, Petroleum Engineer

Subject: 2013 Plan of Development Natural Buttes Unit

Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2013 within the Natural Buttes Unit, Uintah County, Utah.

API # WELL NAME LOCATION

(Proposed PZ WASATCH-MESA VERDE)

#### NBU 1022-5A PAD

43-047-53530 NBU 1022-5A1BS Sec 05 T10S R22E 0808 FNL 0014 FEL BHL Sec 05 T10S R22E 0100 FNL 0497 FEL 43-047-53531 NBU 1022-5A4BS Sec 05 T10S R22E 0794 FNL 0062 FEL BHL Sec 05 T10S R22E 0756 FNL 0492 FEL 43-047-53532 NBU 1022-5A1CS Sec 05 T10S R22E 0805 FNL 0024 FEL BHL Sec 05 T10S R22E 0420 FNL 0492 FEL 43-047-53589 NBU 1022-5H1CS Sec 05 T10S R22E 0802 FNL 0033 FEL BHL Sec 05 T10S R22E 1761 FNL 0492 FEL 43-047-53590 NBU 1022-5H1BS Sec 05 T10S R22E 0799 FNL 0043 FEL BHL Sec 05 T10S R22E 1426 FNL 0492 FEL 43-047-53591 NBU 1022-5A4CS Sec 05 T10S R22E 0797 FNL 0053 FEL BHL Sec 05 T10S R22E 1091 FNL 0492 FEL NBU 1022-5J PAD 43-047-53563 NBU 1022-5J1BS Sec 05 T10S R22E 2136 FSL 2386 FEL BHL Sec 05 T10S R22E 2464 FSL 1817 FEL 43-047-53564 NBU 1022-5F4CS Sec 05 T10S R22E 2115 FSL 2408 FEL BHL Sec 05 T10S R22E 2439 FNL 2143 FWL 43-047-53598 NBU 1022-5K1CS Sec 05 T10S R22E 2102 FSL 2423 FEL BHL Sec 05 T10S R22E 2246 FSL 2160 FWL 43-047-53599 NBU 1022-5K1BS Sec 05 T10S R22E 2109 FSL 2415 FEL BHL Sec 05 T10S R22E 2604 FSL 2144 FWL

RECEIVED: February 26, 2013

API # WELL NAME LOCATION

(Proposed PZ WASATCH-MESA VERDE)

NBU 1022-5J PAD 43-047-53600 NBU 1022-5J4BS Sec 05 T10S R22E 2122 FSL 2400 FEL BHL Sec 05 T10S R22E 1765 FSL 1816 FEL 43-047-53601 NBU 1022-5J1CS Sec 05 T10S R22E 2129 FSL 2393 FEL BHL Sec 05 T10S R22E 2101 FSL 1816 FEL NBU 1022-5I3 PAD 43-047-53565 NBU 1022-5P4CS Sec 05 T10S R22E 1410 FSL 0824 FEL BHL Sec 05 T10S R22E 0205 FSL 0499 FEL 43-047-53566 NBU 1022-5P4BS Sec 05 T10S R22E 1420 FSL 0821 FEL BHL Sec 05 T10S R22E 0586 FSL 0494 FEL 43-047-53567 NBU 1022-5P1CS Sec 05 T10S R22E 1429 FSL 0818 FEL BHL Sec 05 T10S R22E 0921 FSL 0494 FEL 43-047-53568 NBU 1022-501BS Sec 05 T10S R22E 1439 FSL 0815 FEL BHL Sec 05 T10S R22E 1093 FSL 1818 FEL 43-047-53569 NBU 1022-5J4CS Sec 05 T10S R22E 1448 FSL 0812 FEL BHL Sec 05 T10S R22E 1429 FSL 1817 FEL NBU 1022-5I PAD 43-047-53570 NBU 1022-513AS Sec 05 T10S R22E 1944 FSL 0185 FEL BHL Sec 05 T10S R22E 1809 FSL 0852 FEL 43-047-53571 NBU 1022-511BS Sec 05 T10S R22E 1947 FSL 0175 FEL BHL Sec 05 T10S R22E 2543 FSL 0517 FEL 43-047-53572 NBU 1022-5H4CS Sec 05 T10S R22E 1950 FSL 0166 FEL BHL Sec 05 T10S R22E 2432 FNL 0493 FEL 43-047-53573 NBU 1022-5H4BS Sec 05 T10S R22E 1954 FSL 0156 FEL BHL Sec 05 T10S R22E 2097 FNL 0492 FEL NBU 1022-5E PAD 43-047-53575 NBU 1022-5E4CS Sec 05 T10S R22E 1568 FNL 1089 FWL BHL Sec 05 T10S R22E 2555 FNL 0846 FWL 43-047-53576 NBU 1022-5E4BS Sec 05 T10S R22E 1559 FNL 1085 FWL BHL Sec 05 T10S R22E 2150 FNL 0854 FWL 43-047-53577 NBU 1022-5E1AS Sec 05 T10S R22E 1550 FNL 1080 FWL BHL Sec 05 T10S R22E 1410 FNL 1260 FWL 43-047-53578 NBU 1022-5D2DS Sec 05 T10S R22E 1542 FNL 1075 FWL BHL Sec 05 T10S R22E 0435 FNL 0628 FWL NBU 1022-5C Pad 43-047-53579 NBU 1022-5F4BS Sec 05 T10S R22E 1261 FNL 2602 FWL BHL Sec 05 T10S R22E 2102 FNL 2143 FWL 43-047-53580 NBU 1022-5F1CS Sec 05 T10S R22E 1251 FNL 2600 FWL BHL Sec 05 T10S R22E 1766 FNL 2142 FWL 43-047-53581 NBU 1022-5C4BS Sec 05 T10S R22E 1241 FNL 2597 FWL BHL Sec 05 T10S R22E 1081 FNL 2140 FWL 43-047-53582 NBU 1022-5C1DS Sec 05 T10S R22E 1222 FNL 2593 FWL BHL Sec 05 T10S R22E 0532 FNL 2413 FWL 43-047-53583 NBU 1022-5C1BS Sec 05 T10S R22E 1232 FNL 2595 FWL BHL Sec 05 T10S R22E 0115 FNL 2150 FWL Page 2

API # WELL NAME LOCATION

(Proposed PZ WASATCH-MESA VERDE)

NBU 1022-5B			Coo	0.5	m10c	DOOR	1007	TUNIT	1061	
43-047-53584	NBU					R22E R22E				
43-047-53585	NBU					R22E R22E				
43-047-53586	NBU					R22E R22E				
43-047-53587	NBU					R22E R22E				
43-047-53588	NBU					R22E R22E				
NBU 1022-5N	PAD									
43-047-53592	NBU					R22E R22E				
43-047-53593	NBU					R22E R22E		_		
43-047-53594	NBU					R22E R22E		_		
43-047-53595	NBU				T10S T10S		1243 1141	_		FWL FWL
43-047-53596	NBU					R22E R22E				
43-047-53597		BHL				R22E R22E				
<b>NBU 921-21B</b> 43-047-53604		921-21A1BS				R21E R21E				
43-047-53608	NBU					R21E R21E				
43-047-53609	NBU					R21E R21E				
43-047-53622		BHL				R21E R21E				
NBU 921-21C			_	0.4		- 0 1 -	0000		4	
43-047-53605	NBU					R21E R21E				
43-047-53606	NBU					R21E R21E				
43-047-53607	NBU					R21E R21E				
43-047-53613	NBU					R21E R21E				

Page 3

API # WELL NAME LOCATION

(Proposed PZ WASATCH-MESA VERDE)

### NBU 921-21D PAD 43-047-53610 NBU 921-21D1CS Sec 21 T09S R21E 0243 FNL 1065 FWL BHL Sec 21 T09S R21E 0578 FNL 0826 FWL 43-047-53611 NBU 921-21D1BS Sec 21 T09S R21E 0240 FNL 1056 FWL BHL Sec 21 T09S R21E 0248 FNL 0826 FWL 43-047-53623 NBU 921-21D4BS Sec 21 T09S R21E 0246 FNL 1075 FWL BHL Sec 21 T09S R21E 0929 FNL 0826 FWL NBU 921-21G PAD 43-047-53624 NBU 921-21H1CS Sec 21 T09S R21E 1766 FNL 1748 FEL BHL Sec 21 T09S R21E 1743 FNL 0495 FEL 43-047-53625 NBU 921-21G4BS Sec 21 T09S R21E 1760 FNL 1768 FEL BHL Sec 21 T09S R21E 2237 FNL 1823 FEL 43-047-53626 NBU 921-21G1CS Sec 21 T09S R21E 1757 FNL 1777 FEL BHL Sec 21 T09S R21E 1906 FNL 1822 FEL 43-047-53627 NBU 921-21G1BS Sec 21 T09S R21E 1754 FNL 1787 FEL BHL Sec 21 T09S R21E 1574 FNL 1822 FEL NBU 921-21F PAD 43-047-53628 NBU 921-21F4BS Sec 21 T09S R21E 1613 FNL 2171 FWL BHL Sec 21 T09S R21E 2070 FNL 2154 FWL 43-047-53629 NBU 921-21F1CS Sec 21 T09S R21E 1612 FNL 2161 FWL BHL Sec 21 T09S R21E 1739 FNL 2153 FWL 43-047-53630 NBU 921-21F1BS Sec 21 T09S R21E 1615 FNL 2181 FWL BHL Sec 21 T09S R21E 1407 FNL 2153 FWL 43-047-53631 NBU 921-21C4CS Sec 21 T09S R21E 1616 FNL 2191 FWL BHL Sec 21 T09S R21E 1076 FNL 2153 FWL



Digitally signed by Michael L. Coulthard DN: cn=Michael L. Coulthard, o=Bureau of Land Date: 2013.02.26 08:11:16 -07'00'

bcc: File - Natural Buttes Unit Division of Oil Gas and Mining Central Files Agr. Sec. Chron Fluid Chron

MCoulthard:mc:2-26-13

Page 4

API NUMBER	WELL NAME	SURFACE LOCATION
43-047-53530	NBU 1022-5A1BS	Sec 05 T10S R22E 0808 FNL 0014 FEL
43-047-53531	NBU 1022-5A4BS	Sec 05 T10S R22E 0794 FNL 0062 FEL
43-047-53532	NBU 1022-5A1CS	Sec 05 T10S R22E 0805 FNL 0024 FEL
43-047-53563	NBU 1022-5J1BS	Sec 05 T10S R22E 2136 FSL 2386 FEL
43-047-53564	NBU 1022-5F4CS	Sec 05 T10S R22E 2115 FSL 2408 FEL
43-047-53565	NBU 1022-5P4CS	Sec 05 T10S R22E 1410 FSL 0824 FEL
43-047-53566	NBU 1022-5P4BS	Sec 05 T10S R22E 1420 FSL 0821 FEL
43-047-53567	NBU 1022-5P1CS	Sec 05 T10S R22E 1429 FSL 0818 FEL
43-047-53568	NBU 1022-501BS	Sec 05 T10S R22E 1439 FSL 0815 FEL
43-047-53569	NBU 1022-5J4CS	Sec 05 T10S R22E 1448 FSL 0812 FEL
43-047-53570	NBU 1022-5I3AS	Sec 05 T10S R22E 1944 FSL 0185 FEL
43-047-53571	NBU 1022-5I1BS	Sec 05 T10S R22E 1947 FSL 0175 FEL
43-047-53572	NBU 1022-5H4CS	Sec 05 T10S R22E 1950 FSL 0166 FEL
43-047-53573	NBU 1022-5H4BS	Sec 05 T10S R22E 1954 FSL 0156 FEL
43-047-53575	NBU 1022-5E4CS	Sec 05 T10S R22E 1568 FNL 1089 FWL
43-047-53576	NBU 1022-5E4BS	Sec 05 T10S R22E 1559 FNL 1085 FWL
43-047-53577	NBU 1022-5E1AS	Sec 05 T10S R22E 1550 FNL 1080 FWL
43-047-53578	NBU 1022-5D2DS	Sec 05 T10S R22E 1542 FNL 1075 FWL
43-047-53579	NBU 1022-5F4BS	Sec 05 T10S R22E 1261 FNL 2602 FWL
43-047-53580	NBU 1022-5F1CS	Sec 05 T10S R22E 1251 FNL 2600 FWL
43-047-53581	NBU 1022-5C4BS	Sec 05 T10S R22E 1241 FNL 2597 FWL
43-047-53582	NBU 1022-5C1DS	Sec 05 T10S R22E 1222 FNL 2593 FWL
43-047-53583	NBU 1022-5C1BS	Sec 05 T10S R22E 1232 FNL 2595 FWL
43-047-53584	NBU 1022-5G4BS	Sec 05 T10S R22E 1087 FNL 1961 FEL
43-047-53585	NBU 1022-5G1BS	Sec 05 T10S R22E 1084 FNL 1951 FEL
43-047-53586	NBU 1022-5B4BS	Sec 05 T10S R22E 1075 FNL 1923 FEL
43-047-53587	NBU 1022-5B1CS	Sec 05 T10S R22E 1078 FNL 1932 FEL
43-047-53588	NBU 1022-5B1BS	Sec 05 T10S R22E 1081 FNL 1942 FEL
43-047-53589	NBU 1022-5H1CS	Sec 05 T10S R22E 0802 FNL 0033 FEL
43-047-53590	NBU 1022-5H1BS	Sec 05 T10S R22E 0799 FNL 0043 FEL
43-047-53591	NBU 1022-5A4CS	Sec 05 T10S R22E 0797 FNL 0053 FEL
43-047-53592	NBU 1022-503AS	Sec 05 T10S R22E 1269 FSL 2004 FWL
43-047-53593	NBU 1022-5N1CS	Sec 05 T10S R22E 1260 FSL 1999 FWL
43-047-53594	NBU 1022-5M4AS	Sec 05 T10S R22E 1235 FSL 1982 FWL
43-047-53595	NBU 1022-5M1BS	Sec 05 T10S R22E 1243 FSL 1988 FWL
43-047-53596	NBU 1022-5L4CS	Sec 05 T10S R22E 1252 FSL 1993 FWL
43-047-53597	NBU 1022-5K4CS	Sec 05 T10S R22E 1277 FSL 2009 FWL
43-047-53598	NBU 1022-5K1CS	Sec 05 T10S R22E 2102 FSL 2423 FEL
43-047-53599	NBU 1022-5K1BS	Sec 05 T10S R22E 2109 FSL 2415 FEL
43-047-53600	NBU 1022-5J4BS	Sec 05 T10S R22E 2122 FSL 2400 FEL
43-047-53601	NBU 1022-5J1CS	Sec 05 T10S R22E 2129 FSL 2393 FEL
43-047-53604	NBU 921-21A1BS	Sec 21 T09S R21E 0651 FNL 2056 FEL
43-047-53605	NBU 921-21C4BS	Sec 21 T09S R21E 0978 FNL 1707 FWL
43-047-53606	NBU 921-21C1CS	Sec 21 T09S R21E 0975 FNL 1698 FWL
43-047-53607	NBU 921-21C1BS	Sec 21 T09S R21E 0972 FNL 1688 FWL

1 OF 2 2/25/2013

API NUMBER	WELL NAME	SURFACE LOCATION			
43-047-53608	NBU 921-21B4CS	Sec 21 T09S R21E 0650 FNL 2086 FEL			
43-047-53609	NBU 921-21B1BS	Sec 21 T09S R21E 0650 FNL 2066 FEL			
43-047-53610	NBU 921-21D1CS	Sec 21 T09S R21E 0243 FNL 1065 FWL			
43-047-53611	NBU 921-21D1BS	Sec 21 T09S R21E 0240 FNL 1056 FWL			
43-047-53613	NBU 921-21D4CS	Sec 21 T09S R21E 0969 FNL 1679 FWL			
43-047-53622	NBU 921-21B4BS	Sec 21 T09S R21E 0650 FNL 2076 FEL			
43-047-53623	NBU 921-21D4BS	Sec 21 T09S R21E 0246 FNL 1075 FWL			
43-047-53624	NBU 921-21H1CS	Sec 21 T09S R21E 1766 FNL 1748 FEL			
43-047-53625	NBU 921-21G4BS	Sec 21 T09S R21E 1760 FNL 1768 FEL			
43-047-53626	NBU 921-21G1CS	Sec 21 T09S R21E 1757 FNL 1777 FEL			
43-047-53627	NBU 921-21G1BS	Sec 21 T09S R21E 1754 FNL 1787 FEL			
43-047-53628	NBU 921-21F4BS	Sec 21 T09S R21E 1613 FNL 2171 FWL			
43-047-53629	NBU 921-21F1CS	Sec 21 T09S R21E 1612 FNL 2161 FWL			
43-047-53630	NBU 921-21F1BS	Sec 21 T09S R21E 1615 FNL 2181 FWL			
43-047-53631	NBU 921-21C4CS	Sec 21 T09S R21E 1616 FNL 2191 FWL			

2 OF 2 2/25/2013

API Well Number: 43047536060000

### **WORKSHEET** APPLICATION FOR PERMIT TO DRILL

**APD RECEIVED: 2/12/2013** API NO. ASSIGNED: 43047536060000

WELL NAME: NBU 921-21C1CS

OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P. (N2995) PHONE NUMBER: 720 929-6156

**CONTACT:** Danielle Piernot

PROPOSED LOCATION: NENW 21 090S 210E **Permit Tech Review:** 

> SURFACE: 0975 FNL 1698 FWL **Engineering Review:**

> **BOTTOM: 0414 FNL 2152 FWL** Geology Review:

**COUNTY: UINTAH** 

**LATITUDE**: 40.02809 LONGITUDE: -109.55378 UTM SURF EASTINGS: 623401.00 NORTHINGS: 4431877.00

FIELD NAME: NATURAL BUTTES LEASE TYPE: 1 - Federal

PROPOSED PRODUCING FORMATION(S): WASATCH-MESA VERDE **LEASE NUMBER: UTU**0576

SURFACE OWNER: 2 - Indian **COALBED METHANE: NO** 

**RECEIVED AND/OR REVIEWED: LOCATION AND SITING:** 

✓ PLAT R649-2-3.

Unit: NATURAL BUTTES Bond: FEDERAL - WYB000291

**Potash** R649-3-2. General

Oil Shale 190-5

Oil Shale 190-3 R649-3-3. Exception

Oil Shale 190-13 **Drilling Unit** 

Board Cause No: Cause 173-14 Water Permit: 43-8496

Effective Date: 12/2/1999 **RDCC Review:** 

Siting: Suspends General Siting Fee Surface Agreement

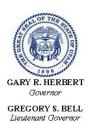
✓ Intent to Commingle R649-3-11. Directional Drill

**Commingling Approved** 

Comments: Presite Completed

Stipulations:

3 - Commingling - ddoucet 4 - Federal Approval - dmason 15 - Directional - dmason 17 - Oil Shale 190-5(b) - dmason



# State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

### Permit To Drill

\*\*\*\*\*\*

Well Name: NBU 921-21C1CS **API Well Number:** 43047536060000

Lease Number: UTU0576 Surface Owner: INDIAN Approval Date: 3/4/2013

#### Issued to:

KERR-MCGEE OIL & GAS ONSHORE, L.P., P.O. Box 173779, Denver, CO 80217

#### Authority:

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 173-14. The expected producing formation or pool is the WASATCH-MESA VERDE Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

#### **Duration:**

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

#### **Commingle:**

In accordance with Board Cause No. 173-14, commingling of the production from the Wasatch formation and the Mesaverde formation in this well is allowed.

#### General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

#### **Conditions of Approval:**

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

In accordance with the Order in Cause No. 190-5(b) dated October 28, 1982, the operator shall comply with the requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operators shall ensure that the surface and or production casing is properly cemented over the entire oil

shale section as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the division.

#### **Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

• Within 24 hours following the spudding of the well - contact Carol Daniels at 801-538-5284

(please leave a voicemail message if not available)

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website

at http://oilgas.ogm.utah.gov

#### Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
  - Requests to Change Plans (Form 9) due prior to implementation
  - Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
  - Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

Approved By:

For John Rogers Associate Director, Oil & Gas Sundry Number: 47524 API Well Number: 43047536060000

	STATE OF UTAH		FORM 9		
	DEPARTMENT OF NATURAL RESOURC DIVISION OF OIL, GAS, AND MIN		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU0576		
SUNDR	RY NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE		
	oposals to drill new wells, significantly or reenter plugged wells, or to drill horizon n for such proposals.		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES		
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 921-21C1CS		
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	9. API NUMBER: 43047536060000				
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18tl	h Street, Suite 600, Denver, CO, 80217	<b>PHONE NUMBER:</b> 73779 720 929-0	9. FIELD and POOL or WILDCAT: 1NATERAL BUTTES		
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0975 FNL 1698 FWL			COUNTY: UINTAH		
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: 21 Township: 09.0S Range: 21.0E Meric	dian: S	STATE: UTAH		
11. CHEC	K APPROPRIATE BOXES TO INDICAT	E NATURE OF NOTICE, REPOR	RT, OR OTHER DATA		
TYPE OF SUBMISSION		TYPE OF ACTION			
✓ NOTICE OF INTENT	ACIDIZE	ALTER CASING	CASING REPAIR		
Approximate date work will start:  3/4/2014	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME		
0/4/2014	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE		
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION		
	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK		
SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION		
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON		
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL		
DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	✓ APD EXTENSION		
·	WILDCAT WELL DETERMINATION	OTHER	OTHER:		
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests an extension to this APD for the maximum time allowed. Please contact the undersigned with any questions and/or comments. Thank you.  Date: February 05, 2014  By:					
NAME (PLEASE PRINT) Teena Paulo	<b>PHONE NUMB</b> 720 929-6236	ER TITLE Staff Regulatory Specialist			
SIGNATURE N/A		<b>DATE</b> 2/5/2014			

Sundry Number: 47524 API Well Number: 43047536060000



#### The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices** 

#### Request for Permit Extension Validation Well Number 43047536060000

API: 43047536060000 Well Name: NBU 921-21C1CS

Location: 0975 FNL 1698 FWL QTR NENW SEC 21 TWNP 090S RNG 210E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

**Date Original Permit Issued:** 3/4/2013

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

• If located on private land, has the ownership changed, if so, has the surface agreement been updated?  Yes  No
• Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?  Yes No
• Has there been any unit or other agreements put in place that could affect the permitting or operation of the proposed well? ( Yes ( No
• Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? ( Yes ( No
• Has the approved source of water for drilling changed? 🔘 Yes 📵 No
<ul> <li>Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?</li> <li>Yes</li> <li>No</li> </ul>
• Is bonding still in place, which covers this proposed well? 🌘 Yes 🔘 No
nature: Teena Paulo Date: 2/5/2014

Sig

Title: Staff Regulatory Specialist Representing: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Form 3160-3 (August 2007)

# APD PMT RCVD

RECEIVED

JUN 24 20 UNITED STATES
BUREAU OF LAND MANAGEMENT

JUL 1 8 2012

FORM APPROVED OMB No. 1004-0136 Expires July 31, 2010

5.
----

APPENDATION FOR FERMIT	TO DRIVE BERNENT Pernai Uta	If Indian, Allottee or Tribe N	ame
1a. Type of Work: DRILL REENTER		7. If Unit or CA Agreement, No. UTU63047A	
1b. Type of Well: Oil Well	ner Single Zone Multiple Zone	8. Lease Name and Well No. NBU 921-21C1CS	
	DANIELLE PIERNOT	9. API Well No. 43047536	010
3a. Address PO BOX 173779 DENVER, CO 80202-3779	3b. Phone No. (include area code) Ph: 720-929-6156 Fx: 720-929-7156	10. Field and Pool, or Explorat NATURAL BUTTES	
4. Location of Well (Report location clearly and in accorda	nce with any State requirements.*)	11. Sec., T., R., M., or Bik. and	Survey or Area
At surface NENW 975FNL 1698FWL	40.026160 N Lat, 109.560107 W Lon	Sec 21 T9S R21E Mer	SLB
At proposed prod. zone NENW 414FNL 2152FWL	40.027700 N Lat, 109.558488 W Lon		
<ol> <li>Distance in miles and direction from nearest town or post APPROXIMATELY 47 MILES SOUTH OF VERI</li> </ol>		12. County or Parish UINTAH COUNTY	13. State UT
<ol> <li>Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 414'</li> </ol>	16. No. of Acres in Lease 1480.00 RECEIVED	17. Spacing Unit dedicated to t	his well
<ol> <li>Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 849'</li> </ol>	19. Proposed Depth 0CT 27 2014 11417 MD 11336 TVD DIV OF OU	20. BLM/BIA Bond No. on file WYB000291	•
21. Elevations (Show whether DF, KB, RT, GL, etc. 4863 GL	22. Approximate date work will start AS & M! V  N  12/30/2012	5 23. Estimated duration 60-90 DAYS	
	24. Attachments	·	
he following, completed in accordance with the requirements of	f Onshore Oil and Gas Order No. 1, shall be attached to t	his form:	
Well plat certified by a registered surveyor.     A Drilling Plan.     A Surface Use Plan (if the location is on National Forest Syst SUPO shall be filed with the appropriate Forest Service Of	Item 20 above). 5. Operator certification	ns unless covered by an existing b	•
25. Signature (Electronic Submission)	Name (Printed/Typed) DANIELLE PIERNOT Ph: 720-929-615		Date 06/21/2012
Title REGULATORY ANALYST II			
Approved by (Signature)	Name (Printed/Typed) Jerry Kencz	ka d	CT 2 1 2014
Title Lands & Mineral Resources	Office VERNAL FIELD OFFI		
Application approval does not warrant or certify the applicant hoperations thereon.  Conditions of approval, if any, are attached.	olds legal or equitable title to those rights in the subject le	ase which would entitle the applic	ÄTTÄCHED

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Additional Operator Remarks (see next page)

Electronic Submission #141210 verified by the BLM Well information System For KERR MCGEE OIL&GAS ONSHORE, LP, sent to the Vernal

**NOTICE OF APPROVAL** 

UDOGN



# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VERNAL FIELD OFFICE

**VERNAL, UT 84078** 

(435) 781-4400



## CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company: Well No:

API No:

KERR MCGEE OIL & GAS ONSHORE

170 South 500 East

MU 921-21C1CS

43-047-53606

Location:

NENW, Sec. 21, T9S, R21E UTU-0576

Lease No: L Agreement:

OFFICE NUMBER:

(435) 781-4400

**OFFICE FAX NUMBER:** 

(435) 781-3420

# A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.

#### **NOTIFICATION REQUIREMENTS**

Location Construction (Notify Environmental Scientist)	-	Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	-	Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings to: blm_ut_vn_opreport@blm.gov
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

Page 2 of 6 Well: NBU 921-21C1CS 10/9/2014

# SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

- All new and replacement internal combustion gas field engines of less than or equal to 300 designrated horsepower must not emit more than 2 gms of NO<sub>x</sub> per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.
- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO<sub>x</sub> per horsepower-hour.
- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop
  work and contact the Authorized Officer (AO). A determination will be made by the AO as to what
  mitigation may be necessary for the discovered paleontologic material before construction can
  continue.

#### COA's

NBU 921-21C Well Pad: NBU 921-21C1BS, 921-21C1CS, 921-21C4BS, 921-21D4CS

- Paint facilities "Shadow Gray."
- Conduct a raptor survey prior to construction operations if such activities would take place during raptor nesting season (January 1 through September 30). If active raptor nests are identified during the survey, operations should be conducted according to the seasonal restrictions detailed in the Uinta Basin-specific RMP guidelines and spatial offsets specified by the USFWS Utah Raptor Guidelines.
- If construction operations are not initiated prior to April 12, 2013, an additional biological survey for Uinta Basin hookless cactus should be conducted prior to construction according to current USFWS protocol.
- Monitor construction with a permitted archaeologist.
- Monitor access road, well pad, and pipeline construction with a permitted paleontologist.
- Double-line the reserve pit.

Page 3 of 6 Well: NBU 921-21C1CS 10/9/2014

# DOWNHOLE PROGRAM CONDITIONS OF APPROVAL (COAs)

#### SITE SPECIFIC DOWNHOLE COAs:

- Gamma Ray Log shall be run from Total Depth to Surface.
- CBL will be run from TD to TOC.
- Cement for the surface casing will be circulated to the surface

#### Variances Granted

All variances approved as written in APD.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

#### DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily
  drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order
  No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a
  test pump with a chart recorder and <u>NOT</u> by the rig pumps. Test shall be reported in the driller's
  log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- Cement baskets shall not be run on surface casing.
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is
  encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal
  Field Office.

Page 4 of 6 Well: NBU 921-21C1CS 10/9/2014

- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM,
   Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- Please submit an electronic copy of all other logs run on this well by CD (compact disc).
   This submission will supersede the requirement for submittal of paper logs to the BLM.
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

Page 5 of 6 Well: NBU 921-21C1CS 10/9/2014

#### **OPERATING REQUIREMENT REMINDERS:**

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at <a href="https://www.ONRR.gov">www.ONRR.gov</a>.
- Should the well be successfully completed for production, the BLM Vernal Field office must be
  notified when it is placed in a producing status. Such notification will be by written communication
  and must be received in this office by not later than the fifth business day following the date on
  which the well is placed on production. The notification shall provide, as a minimum, the following
  informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location (¼¼, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - o The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - Unit agreement and/or participating area name and number, if applicable.
  - o Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be
  reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported
  verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will
  be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of
  Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid,

Page 6 of 6 Well: NBU 921-21C1CS 10/9/2014

and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office
  Petroleum Engineers will be provided with a date and time for the initial meter calibration and all
  future meter proving schedules. A copy of the meter calibration reports shall be submitted to the
  BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid
  hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall
  be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to
  the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first.
  All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All
  product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in
  accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering
  lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a
  suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be
  obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover
  equipment shall be removed from a well to be placed in a suspended status without prior approval
  of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior
  approval of the BLM Vernal Field Office shall be obtained and notification given before resumption
  of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

Sundry Number: 60594 API Well Number: 43047536060000

	STATE OF UTAH		FORM 9			
ι		3	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU0576			
SUNDR	Y NOTICES AND REPORTS ON	WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE			
current bottom-hole depth, i	reenter plugged wells, or to drill horizontal		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES			
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 921-21C1CS			
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.		9. API NUMBER: 43047536060000			
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th			9. FIELD and POOL or WILDCAT: 6 INATERAL BUTTES			
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0975 FNI 1698 FWI			COUNTY: UINTAH			
QTR/QTR, SECTION, TOWNSH		: S	STATE: UTAH			
11. CHECH	K APPROPRIATE BOXES TO INDICATE N	IATURE OF NOTICE, REPOR	RT, OR OTHER DATA			
TYPE OF SUBMISSION		TYPE OF ACTION				
7	ACIDIZE	ALTER CASING	CASING REPAIR			
Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME			
2/6/2015	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE			
SUBSEQUENT REPORT	DEEPEN	FRACTURE TREAT	☐ NEW CONSTRUCTION			
Date of Work Completion:	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK			
	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION			
SPUD REPORT  Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON			
SUNDE  Do not use this form for procurrent bottom-hole depth, FOR PERMIT TO DRILL form  1. TYPE OF WELL Gas Well  2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS OIL  3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 181  4. LOCATION OF WELL FOOTAGES AT SURFACE: 0975 FNL 1698 FWL QTR/QTR, SECTION, TOWNS Qtr/Qtr: NENW Section:  11. CHEC  TYPE OF SUBMISSION  ✓ NOTICE OF INTENT Approximate date work will start: 2/6/2015  □ SUBSEQUENT REPORT Date of Work Completion:  □ SPUD REPORT Report Date:  12. DESCRIBE PROPOSED OR Kerr-McGee Oil & C to this APD for undersigned will  NAME (PLEASE PRINT) Joel Malefyt	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL			
	WATER SHUTOFF	SI TA STATUS EXTENSION	✓ APD EXTENSION			
Report Date:	WILDCAT WELL DETERMINATION	OTHER	OTHER:			
Do not use this form for proposals to drill now wells, significantly despen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION PROPERTY TO BRILL form for such proposals.  1.TYPE OF WELL Gas Well  2. NAME OF OPERATOR: KERRANGGEE OIL & GAS ONSHORE, L.P.  3. ADDRESS OF OPERATOR: CERTAIN 1999 18th Street, Suite 600, Denver, CO, 80217 3779 720 921-9 1881 1818 AU 107 107 107 107 107 107 107 107 107 107		lepths, volumes, etc.				
Kerr-McGee Oil & C to this APD for	Gas Onshore L.P. respectfully re the maximum time allowed. Ple	equests an extension ease contact the	Approved by the Utebroavis 09, 2015 Oil, Gas and Mining			
-			Date:			
			By: Laggill			
		I				
CUTTEN DOTION-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICA FOR PERMIT TO DRILL form for such proposals.  1. TYPE OF WELL Gas Well  2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.  3. ADDRESS OF OPERATOR: PHONE NUMBER: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779  7.20  4. LOCATION OF WELL FOOTAGES AT SURFACE: 0975 FAIL 1898 FWL GTR/GTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Ottr/QTr: NENW Section: 21 TOWNSHIP: 09.0S Range: 21.0E Meridian: S  11.  CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, F  TYPE OF SUBMISSION  TYPE OF ACTIC  4. MOTHER OF INTENT Approximate date work will start: 2/6/2015 CHANGE TO PREVIOUS PLANS CHANGE WELL STATUS CHANGE TURING CH						
		1				

Sundry Number: 60594 API Well Number: 43047536060000



#### The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices** 

#### Request for Permit Extension Validation Well Number 43047536060000

API: 43047536060000 Well Name: NBU 921-21C1CS

Location: 0975 FNL 1698 FWL QTR NENW SEC 21 TWNP 090S RNG 210E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date Original Permit Issued: 3/4/2013

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

owing to a officerior of come related to the approacher, which cheard be verified.
• If located on private land, has the ownership changed, if so, has the surface agreement been updated? 🔵 Yes 📵 No
• Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?  Yes  No
<ul> <li>Has there been any unit or other agreements put in place that could affect the permitting or operation of the proposed well?</li> <li>Yes</li> <li>No</li> </ul>
<ul> <li>Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?</li> <li>Yes</li> <li>No</li> </ul>
• Has the approved source of water for drilling changed? 🔘 Yes 📵 No
<ul> <li>Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?</li> <li>Yes</li> <li>No</li> </ul>
• Is bonding still in place, which covers this proposed well? 🌘 Yes 🔘 No
nature: Joel Malefyt Date: 2/6/2015

Sig

Title: Regualtory Analyst Representing: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Sundry Number: 70028 API Well Number: 43047536060000

	STATE OF UTAH		FORM 9			
	DEPARTMENT OF NATURAL RESOURG DIVISION OF OIL, GAS, AND MII		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU0576			
SUNDF	RY NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE			
current bottom-hole depth,	reenter plugged wells, or to drill horizo		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES			
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 921-21C1CS					
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	NSHORE, L.P.		9. API NUMBER: 43047536060000			
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18tl	h Street, Suite 600, Denver, CO, 8021	<b>PHONE NUMBER:</b> 7 3779 720 929-	9. FIELD and POOL or WILDCAT: 5NATURAL BUTTES			
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0975 FNI 1698 FWI			COUNTY: UINTAH			
QTR/QTR, SECTION, TOWNSH		idian: S	STATE: UTAH			
11. CHEC	K APPROPRIATE BOXES TO INDICA	TE NATURE OF NOTICE, REPOR	RT, OR OTHER DATA			
TYPE OF SUBMISSION		TYPE OF ACTION				
7	ACIDIZE	ALTER CASING	CASING REPAIR			
Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME			
2/25/2016	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE			
SUBSEQUENT REPORT	DEEPEN DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION			
Date of Work Completion.	OPERATOR CHANGE	PLUG AND ABANDON	5.LEASE DESIGNATION AND SERIAL NUMBER UTU0576  6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE  7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES  8. WELL NAME and NUMBER: NBU 921-21C1CS  9. API NUMBER: 43047536060000  9. FIELD and POOL or WILDCAT: SINATUERAL BUTTES  COUNTY: UINTAH  STATE: UTAH  EPORT, OR OTHER DATA  N  CASING REPAIR  CHANGE WELL NAME  ONS  CONVERT WELL TYPE  NEW CONSTRUCTION  PLUG BACK  RECOMPLETE DIFFERENT FORMATION  TEMPORARY ABANDON  WATER DISPOSAL  APD EXTENSION  OTHER:   ates, depths, volumes, etc.  Approved by the URabr Daris 29, 2016			
	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION			
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON			
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL			
Do not use this form for proposals to drill recurrent bottom-hole depth, reenter plugged FOR PERMIT TO DRILL form for such proposed for PERMIT Such as well as well as a substant proposed for PERMIT Such as well as a substant proposed for PERMIT Such as well as a substant proposed for PERMIT Substant proposed for PERMIT Substant PROPOSED for PRODUCTION Substant PROPOSED for COMPLETED OP Kerr-McGee Oil & Gas Onshore an extension to this APD for the the undersigned with any quality and proposed for PERMIT PROPOSED FOR PROPOSED OPERATOR OF TUBING REPAIR Substant Proposed for PERMIT PROPOSED OPERATOR OPERATOR OF TUBING REPAIR Substant Proposed for PERMIT PROPOSED OPERATOR OPERATOR OF TUBING REPAIR Substant Proposed for PERMIT PROPOSED OPERATOR OPE	WATER SHUTOFF	SI TA STATUS EXTENSION	✓ APD EXTENSION			
Report Date:	WILDCAT WELL DETERMINATION	OTHER	OTHER:			
Kerr-McGee Oil & G an extension to this	as Onshore, L.P. (Kerr-McG APD for the maximum time	ee) respectfully requests allowed. Please contact	Approved by the Utebroavis 29, 2016 Oil, Gas and Mining			
	<b>PHONE NUME</b> 720 929-6808	BER TITLE Regulatory Specialist				
SIGNATURE N/A		<b>DATE</b> 2/25/2016				

Sundry Number: 70028 API Well Number: 43047536060000



#### The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices** 

#### Request for Permit Extension Validation Well Number 43047536060000

API: 43047536060000 Well Name: NBU 921-21C1CS

Location: 0975 FNL 1698 FWL QTR NENW SEC 21 TWNP 090S RNG 210E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date Original Permit Issued: 3/4/2013

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

······································
• If located on private land, has the ownership changed, if so, has the surface agreement been updated?  Yes  No
<ul> <li>Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?</li> <li>Yes</li> <li>No</li> </ul>
<ul> <li>Has there been any unit or other agreements put in place that could affect the permitting or operation of the proposed well?</li> <li>Yes</li> <li>No</li> </ul>
<ul> <li>Have there been any changes to the access route including ownership, or rightof- way, which could affect to proposed location?</li> <li>Yes</li> <li>No</li> </ul>
• Has the approved source of water for drilling changed? Q Yes 📵 No
<ul> <li>Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?</li> <li>Yes</li> <li>No</li> </ul>
• Is bonding still in place, which covers this proposed well? 📵 Yes 🔘 No
inature: Jennifer Thomas Date: 2/25/2016

Title: Regulatory Specialist Representing: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Form 3160-5 (August 2007)

#### **UNITED STATES** DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

RECEIVED

FORM APPROVED 04-0135 1, 2010

•	OMB NO. IO
	Expires: July 3
	5. Lease Serial No. UTU0576

SUNDRY NOTICES AND REPORTS ON WELLS	SFP	19	2016
In not use this form for proposals to drill or to re-enter	مر مر		

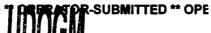
abandoned well. Use form 3160-3 (APD) for such proposals.

BLM VERNA

_			
	If Indian	Allottee	or Tribe Na

SUBMIT IN TRI	PLICATE - Other instruct	tions on rev	erse sid	le.	·	7. If Unit or CA/Agree UTU63047A	ement, N	ame and/	or No.	
1. Type of Well					8. Well Name and No. NBU 921-21C1CS					
Oil Well  Gas Well Ot	<del></del>						,			
2. Name of Operator Contact: JOEL MALEFYT KERR MCGEE OIL & GAS ONSHORE-Mail: JOEL.MALEFYT@ANADARKO.COM				9. API Well No. 43-047-53606	43-047-53606					
3a. Address 1368 SOUTH1200 EAST VERNAL, UT 84078		3b. Phone No Ph: 720-92	(include 9-6 <b>826</b>	area code) CEIVE	D	10. Field and Pool, or Exploratory GREATER NATURAL BUTTES				
4. Location of Well (Footage, Sec., 7	., R., M., or Survey Description)					11. County or Parish, and State				
Sec 21 T9S R21E Mer SLB N 40.026160 N Lat, 109.560107			•	<b>17</b> 20		UINTAH COUNTY, UT				
		ום	V.OF.O	L,GAS&	MINING	<u> </u>				
12. CHECK APPI	ROPRIATE BOX(ES) TO	INDICATE	NATU	RE OF NO	OTICE, R	EPORT, OR OTHER	R DAT	`A		
TYPE OF SUBMISSION			,	TYPE OF A	ACTION					
Notice of Intent	☐ Acidize	☐ Dee	pen		☐ Produc	tion (Start/Resume)	o w	ater Shu	t-Off	
	☐ Alter Casing	☐ Frac	ture Trea	t	☐ Reclam	nation	o w	ell Integ	rity	
☐ Subsequent Report	Casing Repair	☐ Nev	/ Constru	ction	☐ Recom	plete	S O		:	
☐ Final Abandonment Notice	☐ Change Plans	☐ Plug	and Aba	ndon	☐ Tempor	rarily Abandon	PD	ige to Or	igiliai A	
	☐ Convert to Injection	Plug	Back		■ Water I	Disposal				
Kerr-McGee Oil & Gas Onsho extension to this APD for the r undersigned with any question Effective 10/21/14	naximum time allowed. Ple ns and/or comments. Than	ease contact	iests an the			VERNAL F	احال ا	OFFIC		
Nepa Expires 10						ENG. RK	12	liali	6	
00101710110 07 1000							\$1. \$4.			
<b>CONDITIONS OF APPROV</b>	AL ATTACHED					GEOL			-	
						E.S	: ***		-	
Recommend Ac	opoval	•				PET	\$. 2		_	
14. I hereby certify that the foregoing is	true and correct.				_	BECI	Ţ			
	Electronic Submission #3: For KERR MCGEE Committed to AFMSS for	E OIL & GAS	onshor	E, sent to	the Verna	1			- ;	
Name (Printed/Typed) JOEL MAI		. ]	-	REGULA		<del></del>				
Signature (Electronic S	ubmission)		Date	10/19/201	6				····	
	THIS SPACE FO	R FEDERA	L OR S							
Approved By	4		Title			Manager Resources	•	EC 2	3 201	
Conditions of appropriate any are attached certify that the appropriate holds legal or equivalent would entitle the applicant to condu	<ol> <li>Approval of this notice does n itable title to those rights in the s ct operations thereon.</li> </ol>	ot warrant or subject lease	Office	/ERNA	L FIEL	D OFFICE				

\*\* OPERATOR-SUBMITTED



Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**∂**\*\*

# **CONDITIONS OF APPROVAL**

# Kerr McGee Oil and Gas Onshore

# Notice of Intent APD Extension

Lease:

UTU-0576

Well:

NBU 921-21C1CS (API: 43-047-53606)

Location:

NENW Sec 21 T-9S R-21E

An extension for the referenced APD is granted with the following conditions:

- 1. The extension and APD shall expire on 10/20/2018.
- 2. No other extension shall be granted.

If you have any other questions concerning this matter, please contact Rachel Knell of this office at (435) 781-4419.